STIC Search Report
EIC 1700

STIC Database Tracking Number: 223398

TO:	From:
Michael Bernshteyn **Location: REM 10A34** **Art Unit : 1713** **May 9, 2007** **Case Serial Number: 10/505370**	**Mei Huang** **Location: EIC 1700** **REMSEN 4B28** **Phone: 571/272-3952** **Mei.huang@uspto.gov**

Search Notes

Examiner Bernshteyn,

Please feel free to contact me if you have any questions or if you would like to refine the search query.

Thank you for using STIC search services!

Mei Huang

Please expedite the search
Thanks Access DB# 223898

SEARCH REQUEST FORM 2w

Scientific and Technical Information Center

Requester's Full Name: MICHAEL BERNSHTEYN Examiner #: 81515 Date: 05/04/07
Art Unit: 1713 Phone Number 30 2-2411 Serial Number: 10/505,270
Mail Box and Bldg/Room Location: Rem. 10A34 Results Format Preferred (circle): (PAPER) DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Copolymers as dewaxing additives

Inventors (please provide full names): Kurt Melancon, Mark Fagan, Scott Pearson, William Hunt

Earliest Priority Filing Date: 10/18/2003

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Ctr
MAY 4 RECD
Pat. & T.M Office

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please, try to find a dewaxing additive comprising monomers A and B according claims 11 and 14 with the limitations for R1 - R8.

Thank you
Michael Bernshteyn

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: MH	NA Sequence (#)	STN ✓
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#) 1	Questel/Orbit
Date Searcher Picked Up:	Bibliographic	Dr.Link
Date Completed: 5/9/07	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
Clerical Prep Time:	Patent Family	WWW/Internet
Online Time:	Other	Other (specify)

PTO-1590 (8-01)

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FILE 'REGISTRY' ENTERED AT 16:55:29 ON 09 MAY 2007
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STRUCTURE FILE UPDATES:    8 MAY 2007  HIGHEST RN 934461-15-1
DICTIONARY FILE UPDATES:   8 MAY 2007  HIGHEST RN 934461-15-1

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http://www.cas.org/support/stngen/stndoc/properties.html

=> d l9 que stat
L4              STR

          6
          O                 C~~Me
          ||               @7  8
CH2=G1~~C--O~~Ak
1    2   3   4   5

VAR G1=CH/7
NODE ATTRIBUTES:
CONNECT IS E1  RC AT   5
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   5
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M12 C  AT   5

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   8

STEREO ATTRIBUTES: NONE
L7              SCR 1918 OR 1929 OR 2026
L9        12648 SEA FILE=REGISTRY SSS FUL L4 NOT L7

100.0% PROCESSED  778783 ITERATIONS                    12648 ANSWERS
SEARCH TIME: 00.00.07


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     FILE 'HCAPLUS' ENTERED AT 15:30:02 ON 09 MAY 2007
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                 1330-20-7/BI OR 142-82-5/BI OR 18299-85-9/BI OR 2495-37-6
                 /BI OR 27458-94-2/BI OR 3006-82-4/BI OR 614-45-9/BI OR
                 78-93-3/BI OR 80-62-6/BI OR 927-07-1/BI OR 97-88-1/BI)

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L3               STR
L4               STR

     FILE 'REGISTRY' ENTERED AT 16:12:51 ON 09 MAY 2007
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L6            36 SEA SSS SAM L4
L7               SCR 1918 OR 1929 OR 2026
L8            24 SEA SSS SAM L4 NOT L7
L9         12648 SEA SSS FUL L4 NOT L7
                 SAV L9 BER370/A
L10            1 SEA ABB=ON  PLU=ON  L2 AND L9
L11          140 SEA ABB=ON  PLU=ON  L9 NOT PMS/CI

     FILE 'HCAPLUS' ENTERED AT 16:33:52 ON 09 MAY 2007
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L13              QUE ABB=ON  PLU=ON  ADDITIVE? OR ADJUVANT? OR AUXILIAR?
L14          253 SEA ABB=ON  PLU=ON  L9(L)L13
L15           64 SEA ABB=ON  PLU=ON  L12 AND L14
L16        10777 SEA ABB=ON  PLU=ON  L9
L17              QUE ABB=ON  PLU=ON  DEWAX? OR DEPARAFFIN? OR DE(W)(WAX?
                 OR PARAFFIN?)
L18            8 SEA ABB=ON  PLU=ON  L16 AND L13 AND L17
L19           70 SEA ABB=ON  PLU=ON  L15 OR L18
L20           65 SEA ABB=ON  PLU=ON  L19 AND (1907-2003)/PY,PRY,AY
L21         2491 SEA ABB=ON  PLU=ON  L11
L22           12 SEA ABB=ON  PLU=ON  L20 AND L21
L23              QUE ABB=ON  PLU=ON  METHACRYLIC? OR METHACRYLATE? OR
                 ACRYLIC? OR ACRYLATE?
L24              QUE ABB=ON  PLU=ON  STYRENE?
L25           12 SEA ABB=ON  PLU=ON  L22 AND (L23 OR L24)
L26           53 SEA ABB=ON  PLU=ON  L20 NOT L25


=> fil hcap
FILE 'HCAPLUS' ENTERED AT 16:55:37 ON 09 MAY 2007
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FILE COVERS 1907 - 9 May 2007  VOL  ISS  ISS
FILE LAST UPDATED: 8 May 2007  (20070508/ED)
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FILE COVERS 1907 - 9 May 2007 VOL 146 ISS 20
FILE LAST UPDATED: 1 May 2007 (20070501/ED)

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=> d 125 ibib abs hitstr hitind 1-12

L25 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1080305 HCAPLUS
DOCUMENT NUMBER: 142:59498
TITLE: Aviation fuel cold flow additives and compositions
INVENTOR(S): Deng, Fang; Carey, William S.; Eldin, Sherif; Goliaszewski, Alan E.
PATENT ASSIGNEE(S): General Electric Company, USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004250465	A1	20041216	US 2003-459775	200306 12 <--
US 2006236597	A1	20061026	US 2006-453766	200606 15 <--
PRIORITY APPLN. INFO.:			US 2003-459775 B1	200306 12 <--

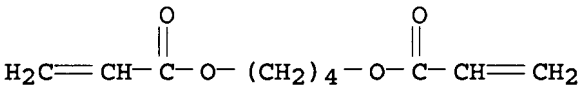
AB Aviation fuel, such as jet fuel, blends and methods for improving cold flow properties of such fuels at extremely low temps. are disclosed. Cold flow properties of, for example, JP-8 based jet fuels are improved by addition to the fuel of a variety of C10 -C16 alkyl poly(meth)**acrylate** esters and polyvinylesters of C10 -C16 alkanoic acids. Demonstratable cold flow improvement of such fuels at temps. of .apprx.-53 °C and below is shown.

IT **118569-93-0P 156451-33-1P 808168-05-0P 808168-06-1P 808168-07-2P**
RL: MOA (Modifier or additive use); PRP (Properties); **PUR (Purification or recovery)**; **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(aviation fuel cold flow **additives** and compns.)

RN 118569-93-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1,4-butanediyl di-2-propenoate (9CI) (CA INDEX NAME)

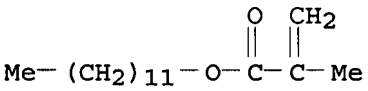
CM 1

CRN 1070-70-8
CMF C10 H14 O4



CM 2

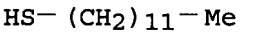
CRN 142-90-5
CMF C16 H30 O2



RN 156451-33-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, telomer with 1-dodecanethiol, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 112-55-0
CMF C12 H26 S

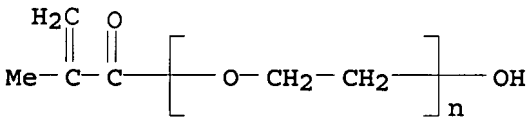


CM 2

CRN 126860-80-8
CMF (C16 H30 O2 . C3 H4 O2 . (C2 H4 O)n C4 H6 O2)x
CCI PMS

CM 3

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



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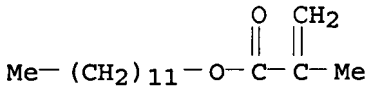
CRN 142-90-5
CMF C16 H30 O2



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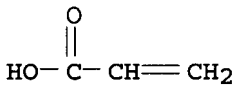
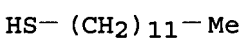
CRN 79-10-7
CMF C3 H4 O2



RN 808168-05-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, tridecyl ester, telomer with 1-dodecanethiol (9CI) (CA INDEX NAME)

CM 1

CRN 112-55-0
CMF C12 H26 S

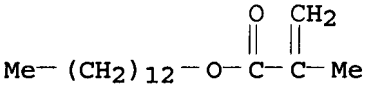


CM 2

CRN 41630-11-9
CMF (C17 H32 O2)x
CCI PMS

CM 3

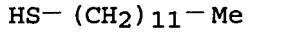
CRN 2495-25-2
CMF C17 H32 O2



RN 808168-06-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, telomer with 1-dodecanethiol (9CI) (CA INDEX NAME)

CM 1

CRN 112-55-0
CMF C12 H26 S

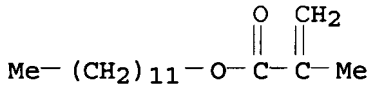


CM 2

CRN 25719-52-2
CMF (C16 H30 O2)x
CCI PMS

CM 3

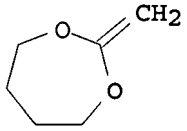
CRN 142-90-5
CMF C16 H30 O2



RN 808168-07-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-methylene-1,3-dioxepane (9CI) (CA INDEX NAME)

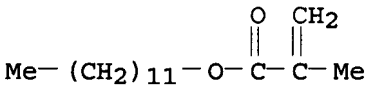
CM 1

CRN 69814-56-8
CMF C6 H10 O2

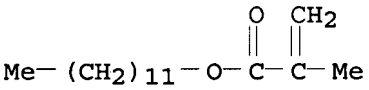


CM 2

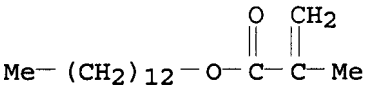
CRN 142-90-5
CMF C16 H30 O2



IT **142-90-5**, Lauryl **methacrylate** **2495-25-2**, Tridecyl **methacrylate**
RL: RCT (Reactant); RACT (Reactant or reagent)
(aviation fuel cold flow **additives** and compns.)
RN 142-90-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester (CA INDEX NAME)



RN 2495-25-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, tridecyl ester (CA INDEX NAME)



IC ICM C10L001-18
INCL 044385000
CC 51-9 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 35, 39
ST aviation fuel cold flow additive **acrylic** polymer telomer transesterification; ring opening radical polymn **acrylic** telomer pour point additive; amide quaternary ammonium salt jet fuel cold flow additive
IT 9003-21-8DP, Poly(methyl **acrylate**), transesterified with C10, C12-, C14-, and C16- alc. mixts. 9003-21-8P, Poly(methyl **acrylate**) 40979-60-0P, Poly(vinyl decanoate) **118569-93-0P 156451-33-1P 808168-05-0P 808168-06-1P 808168-07-2P**
RL: MOA (Modifier or additive use); PRP (Properties); **PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)**; USES (Uses)
(aviation fuel cold flow **additives** and compns.)
IT 85-44-9, Phthalic anhydride 96-33-3, Methyl **acrylate** 112-55-0, n-Dodecyl mercaptan **142-90-5**, Lauryl **methacrylate 2495-25-2**, Tridecyl **methacrylate** 3179-47-3, Decyl **methacrylate** 4704-31-8, Vinyl decanoate 69814-56-8, 2-Methylene-1,3-dioxepane
RL: RCT (Reactant); RACT (Reactant or reagent)
(aviation fuel cold flow **additives** and compns.)

L25 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:719528 HCAPLUS
DOCUMENT NUMBER: 139:231424
TITLE: Production of copolymer **additives** for **deparaffination** of petroleum distillates
INVENTOR(S): Scherer, Markus; Mueller, Michael; Herbeaux, Jean-luc; Janssen, Dieter; Croessmann, Melanie
PATENT ASSIGNEE(S): Rohmax Additives Gmbh, Germany
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074578	A1	20030912	WO 2003-EP1472	200302

14
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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PRIORITY APPLN. INFO.: DE 2002-10208799 A
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WO 2003-EP1472 W
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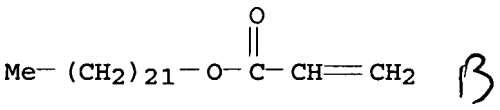
AB A copolymer for producing **additives** for solvent **deparaffination** of paraffin-containing petroleum distillates comprises radically polymerized monomers of the formulas CH2=CR1R2 and CH2=CR7COOR8, where R1 is H or CH3; R2 is Ph, benzyl, naphthyl, anthranyl, phenanthryl, N-pyrrolidonyl, N-imidazolyl, 2-pyridyl, 4-pyridyl, or an alkyl-substituted aromatic radical; or R2 is COOR3, where R3 is H, or a linear or branched C1-C10-alkyl radical, or R3 is a heteroatom-substituted group (CH2)nX, X is OH, or X is N(R4)2,

n is 1-10, R4 is independently H or C1-C4-alkyl radical, or R3 is (CH2CH2O)mR5, m is 1-90, R5 is H, or C1-C18-alkyl radical, or R3 is Ph, benzyl, or cyclohexyl radical; or R2 is CONHR6, where R6 is H or a linear or branched C1-C10-alkyl radical, or a heteroatom-substituted group (CH2)nX with n and X defined as above; R7 is H or CH3; and R8 is a linear or branched C12-C40-alkyl radical. Thus, behenyl **acrylate** (306) comprising 40-46% of C18-alc. **acrylates**, 8-14% of C20-alc. **acrylates** and 42-48% of C22-alc. **acrylates** was polymerized with **styrene** (34) in the presence of dodecyl mercaptan (0.34) chain-transfer agent, tert-Bu perpivalate (0.64) and tert-Bu perbenzoate (0.38 g) initiators, the polymerization being carried out at 80° for 2 h and at 130° for 10-12 h, the copolymer having weight-average mol. weight of 490,000 (PMMA stds.). The copolymer (300 ppm) was used as a viscosity improver for a petroleum feedstock dissolved in heptane (1:2).

IT **18299-85-9DP**, Behenyl **acrylate**, **styrene** -containing **acrylic** polymers
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(production of copolymer **additives** for **deparaffination** of petroleum distillates)

RN 18299-85-9 HCAPLUS

CN 2-Propenoic acid, docosyl ester (CA INDEX NAME)



IC ICM C08F220-18
ICS C10G073-04

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 51

ST **acrylic** copolymer **additive** petroleum distillate **deparaffination dewaxing**

IT Alcohols, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(C10-16, Lorol Special, transesterification products with Me **methacrylate**, polymers with C16-C18-alc. **methacrylates**; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Alcohols, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(C12-15, Neodol 25E, transesterification products with Me **methacrylate**, polymers with C16-C18-alc. **methacrylates**; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Alcohols, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(C14-18, TA 1618E, transesterification products with Me **methacrylate**, polymers; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Alcohols, preparation

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(C18-22, **acrylates**, polymers; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Petroleum refining
(**deparaffination**; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Petroleum refining
(**dewaxing**; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Solvents
(organic; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Naphthenic oils
Paraffin oils
Petroleum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Polymerization
(radical; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Naphtha
RL: NUU (Other use, unclassified); USES (Uses)
(solvent for **dewaxing**; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT Lubricating oil **additives**
(viscosity improvers; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT 614-45-9, tert-Butyl perbenzoate 927-07-1, tert-Butyl perpivalate 3006-82-4
RL: CAT (Catalyst use); USES (Uses)
(production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT 80-62-6DP, Methyl **methacrylate**, transesterification products with higher alcs., polymers 97-88-1DP, n-Butyl **methacrylate**, polymers with C18-C22-alc. **acrylates** 100-42-5DP, **Styrene**, polymers with C18-C22-alc. **acrylates** 2495-37-6DP, Benzyl **methacrylate**, polymers with C18-C22-alc. **acrylates** **18299-85-9DP**, Behenyl **acrylate**, **styrene**-containing **acrylic** polymers 27458-94-2DP, Isononanol, transesterification products with Me **methacrylate**, polymers with C18-C22-alc. **acrylates**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT 1330-20-7, Xylene, uses
RL: NUU (Other use, unclassified); USES (Uses)
(solvent for **dewaxing**; production of copolymer **additives** for **deparaffination** of petroleum distillates)

IT 78-93-3, Methyl ethyl ketone, uses 108-88-3, Toluene, uses 142-82-5, Heptane, uses
RL: NUU (Other use, unclassified); USES (Uses)
(solvent for petroleum **dewaxing**; production of copolymer

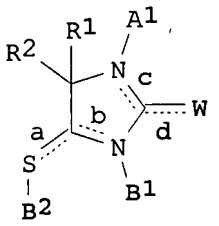
additives for **deparaffination** of petroleum distillates)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:591703 HCAPLUS
DOCUMENT NUMBER: 137:157039
TITLE: Synthesis and use of imidazolidinethione-based oil-soluble lubricating oil antiwear, extreme-pressure additives
INVENTOR(S): Mukkamala, Ravindranath
PATENT ASSIGNEE(S): Rohm and Haas Company, USA
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1229023	A1	20020807	EP 2002-250439	20020122 <--
EP 1229023	B1	20030917		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP 1361217	A1	20031112	EP 2003-9516	20020122 <--
EP 1361217	B1	20050323		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, MK, CY, AL, TR				
JP 2002332276	A	20021122	JP 2002-15555	20020124 <--
PRIORITY APPLN. INFO.:			US 2001-263776P P	20010124 <--
			EP 2002-250439 A3	20020122 <--

OTHER SOURCE(S): MARPAT 137:157039
GI



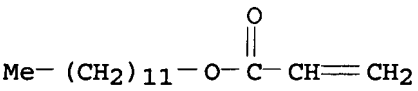
I

AB Thioimidazolidine derivs., as antiwear, extreme-pressure lubricating oil additives, are of general structure I, in which W = O, S-A2, or two R groups (R3 and R4); one of bonds a and b is a single bond (with the other being a double bond); one of bonds c and d is a single bond (with the other being a double bond); and W is R3 and R4 when d is two single bonds. A1, A2, B1, and B2 are H, alkyl, alkenyl, aralkyl, CH(R5)m-CH(R6)m-C(:Y)ZR7 (or CH(R5)m=-CH(R6)m-C(:Y)ZR7), CH2NHR8, or C(:O)CHn-CHnC(:O)OH (or C(:O)CHn=CHnC(:O)OH), provided that: (1) B1 is absent when b is a double bond; (2) B2 is absent when a is a double bond; (3) A1 is absent when c is a double bond; (4) A2 is absent when d is a double bond; (5) A2 or B2 is not aralkyl when W is O or S-A2. Furthermore, R1, R2, R3, and R4 are H, alkyl, alkenyl, aryl, or aralkyl; R1 and R2, or R3 and R4 combined with the carbon atom to which they are attached to form an alkyl or alkenyl ring; Y is O or S; Z is O, S, or NR9; m = 0 when bond e is a double bond and m = 1 when e is a single bond; n = 1 when bond f is a double bond and 2 when f is a single bond; R5 is C(:Y)ZR7, H, or C1-4-alkyl; R6 is H or C1-4-alkyl; R7, R8, and R9 are H, alkyl, alkenyl, aryl, or aralkyl.

IT **2156-97-0DP**, Lauryl **acrylate**, alkylation products with 2,2,5,5-tetramethyl-4-imidazolidinethione or 7,14-Diazadispiro[5.1.5.2]pentadecane-15-thione
RL: MOA (Modifier or additive use); PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(synthesis and use of imidazolidinethione-based oil-soluble lubricating oil antiwear, extreme-pressure **additives**)

RN 2156-97-0 HCAPLUS

CN 2-Propenoic acid, dodecyl ester (CA INDEX NAME)



IC ICM C07D233-42

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 28

IT Alkylation
(of imidazolidinethiones, with alkyl **acrylates**; in synthesis of imidazolidinethione-based oil-soluble lubricating oil antiwear, extreme-pressure additives)

IT 67-64-1DP, Acetone, reaction products with ammonium sulfide, ammonium chloride, sodium cyanide, cyclohexanone, Me Et ketone, and Me iso-Bu ketone; alkylation products with 2-ethylhexyl **acrylate** 78-93-3DP, Methyl ethyl ketone, reaction products with ammonium sulfide, ammonium chloride, sodium cyanide,

cyclohexanone, acetone, and Me iso-Bu ketone; alkylation products with 2-ethylhexyl **acrylate** 108-10-1DP, Methyl isobutyl ketone, reaction products with ammonium sulfide, ammonium chloride, sodium cyanide, cyclohexanone, acetone, and Me Et ketone; alkylation products with 2-ethylhexyl **acrylate** 108-94-1DP, Cyclohexanone, reaction products with ammonium sulfide, ammonium chloride, sodium cyanide, acetone, Me Et ketone, and Me iso-Bu ketone; alkylation products with 2-ethylhexyl **acrylate** 143-33-9DP, Sodium cyanide, reaction products with ammonium sulfide, ammonium chloride, cyclohexanone, acetone, Me Et ketone, and Me iso-Bu ketone; alkylation products with 2-ethylhexyl **acrylate** 12135-76-1DP, Ammonium sulfide, reaction products with sodium cyanide, ammonium chloride, cyclohexanone, acetone, Me Et ketone, and Me iso-Bu ketone; alkylation products with 2-ethylhexyl **acrylate**
RL: MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(synthesis and alkylation of; synthesis and use of imidazolidinethione-based oil-soluble lubricating oil antiwear, extreme-pressure additives)

IT 103-11-7DP, 2-Ethylhexyl **acrylate**, alkylation products with 2,2,5,5-tetramethyl-4-imidazolidinethione or mixed tetraalkyl-4-imidazolidinethiones 141-32-2DP, alkylation products with 2,2,5,5-tetramethyl-4-imidazolidinethione **2156-97-0DP**, Lauryl **acrylate**, alkylation products with 2,2,5,5-tetramethyl-4-imidazolidinethione or 7,14-Diazadispiro[5.1.5.2]pentadecane-15-thione 50636-08-3DP, 4-Imidazolidinethione, 2,5-diethyl-2,5-dimethyl-, alkylation products with alkyl **acrylates** 445043-85-6DP, alkylation products with 2,2,5,5-tetramethyl-4-imidazolidinethione
RL: MOA (Modifier or additive use); PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(synthesis and use of imidazolidinethione-based oil-soluble lubricating oil antiwear, extreme-pressure **additives**)

IT 4833-50-5DP, 7,14-Diazadispiro[5.1.5.2]pentadecane-15-thione, alkylation products with alkyl **acrylates** 323574-26-1DP, 4-Imidazolidinethione, 2,2,5,5-tetraalkyl derivs., alkylation products with alkyl **acrylates**
RL: MOA (Modifier or additive use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(synthesis and use of imidazolidinethione-based oil-soluble lubricating oil antiwear, extreme-pressure additives)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:640708 HCAPLUS
DOCUMENT NUMBER: 127:263907
TITLE: **Acrylic** copolymers as additives for inhibiting paraffin wax deposition in crude oils, their preparation and compositions containing them
INVENTOR(S): Brunelli, Jean-Francois; Fouquay, Stephane
PATENT ASSIGNEE(S): Ceca S.A., Fr.; Brunelli, Jean-Francois; Fouquay, Stephane
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9734940	A1	19970925	WO 1997-FR464	19970314
			<--	
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2746400	A1	19970926	FR 1996-3534	19960321
			<--	
FR 2746400	B1	19980424		
FR 2746401	A1	19970926	FR 1996-3535	19960321
			<--	
FR 2746401	B1	19980424		
CA 2246587	A1	19970925	CA 1997-2246587	19970314
			<--	
CA 2246587	C	19970925		
AU 9721656	A	19971010	AU 1997-21656	19970314
			<--	
EP 888392	A1	19990107	EP 1997-914403	19970314
			<--	
R: DE, FR, GB, IT, NL				
EG 21023	A	20000930	EG 1997-206	19970319
			<--	
NO 9804346	A	19980918	NO 1998-4346	19980918
			<--	
US 6218490	B1	20010417	US 1999-155111	19990111
			<--	
PRIORITY APPLN. INFO.:			FR 1996-3534 A	19960321
			<--	
			FR 1996-3535 A	

199603
21
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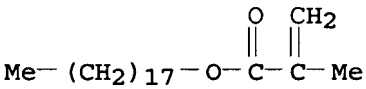
WO 1997-FR464 W
199703
14
<--

AB The additives, which are effective in a wider range of crude oils than previous types, are essentially C10-50-n-alkyl (meth) **acrylate** copolymers of weight-average mol. weight (Mw) 5000-500,000 with different distributions of alkyl chain length for the upper (C24-50) and lower (C10-22) portions of the range, as well as their corresponding 2- and/or 4-vinylpyridine-containing copolymers. Thus, copolymn. with tert-BuOOBz in xylene of 70 parts Norsocryl 18-22 (mixture of mostly C18-22-alkyl **acrylates**) with 30 parts of a mixture of higher alkyl **acrylates** of average mol. weight 425 with a normal chain-length distribution gave a copolymer (I) with Mw 146,000 in >97% yield. Addition of 100 ppm I to a Gabon crude oil containing 15% paraffin reduced the pour point from +18° to -18°.

IT **32360-05-7DP**, Stearyl **methacrylate**, polymers with mixed linear alkyl **acrylates**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(**acrylic** copolymers as **additives** for inhibiting paraffin wax deposition in crude oils)

RN 32360-05-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester (CA INDEX NAME)



IC ICM C08F220-18
ICS C08F226-08

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 51

ST alkyl **acrylate** copolymer petroleum additive; pour point depressant crude oil

IT Pour-point depressants
(**acrylic** copolymers as additives for inhibiting paraffin wax deposition in crude oils)

IT 79-10-7DP, **Acrylic** acid, linear alkyl ester mixts., homopolymers or copolymers with vinylpyridine 100-43-6DP, 4-Vinylpyridine, polymers with mixed linear alkyl **acrylates** 100-69-6DP, 2-Vinylpyridine, polymers with mixed linear alkyl **acrylates** **32360-05-7DP**, Stearyl **methacrylate**, polymers with mixed linear alkyl **acrylates**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(**acrylic** copolymers as **additives** for inhibiting paraffin wax deposition in crude oils)

L25 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:542226 HCAPLUS
DOCUMENT NUMBER: 127:236599
TITLE: Fuel oil compositions

INVENTOR(S): Fukumoto, Masahiro; Nishioka, Shinya; Shizuka, Nobuhiko
PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09208973	A	19970812	JP 1996-16448	19960201

<--

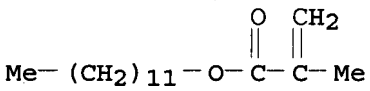
PRIORITY APPLN. INFO.: JP 1996-16448 19960201

<--

AB Low-S fuel oil compns. with improved lubricity and antifriction properties on diesel engine parts comprise (A) fuel oils having S content <0.2 weight% and aroms. content <40 weight% and (B) amide group-containing polymers having needle penetration >10 (at 25°) and comprising amide group-containing monomers and >1 α-olefin monomers at 0.0001-0.5 weight% concentration, vs. the fuel oils.

IT **142-90-5DP**, Lauryl **methacrylate**, polymers with maleic anhydride and C22-30-α-olefins, reaction products with C14-18 monoamines **195325-14-5DP**, reaction products with C18 monoamines
RL: MOA (Modifier or additive use); **PNU (Preparation, unclassified)**; **PREP (Preparation)**; USES (Uses)
(**additives**; fuel oil compns. containing)

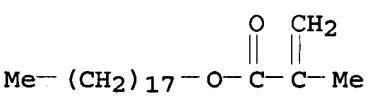
RN 142-90-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester (CA INDEX NAME)



RN 195325-14-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 2,5-furandione and 1-octadecene (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7
CMF C22 H42 O2



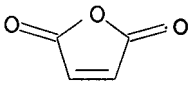
CM 2

CRN 112-88-9
CMF C18 H36

$H_2C{=}CH{-}(CH_2)_{15}{-}Me$

CM 3

CRN 108-31-6
CMF C4 H2 O3



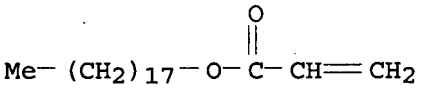
IC ICM C10L001-22
ICS C10L001-16; C10L001-18
CC 51-9 (Fossil Fuels, Derivatives, and Related Products)
IT Monoamines
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(C14-18, reaction products with maleic anhydride-(meth) **acrylates**-α-olefins-(**styrene**) copolymers; fuel oil compns. containing additives of)
IT Polyolefins
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(C16-30, with maleic anhydride-(meth)**acrylates**-(**styrene**), C14-18-monoamine adducted; fuel oil compns. containing additives of)
IT 79-10-7D, **Acrylic** acid, C12-14-alkyl esters, polymers
108-05-4D, Vinyl acetate, polymers with C12-16-alkyl **acrylates** 9010-79-1, Ethylene-propylene copolymer
24937-78-8, Ethylene-vinyl acetate copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(additives; fuel oil compns. containing)
IT 100-42-5DP, **Styrene**, polymers with maleic or itaconic anhydride and α-olefins and (meth) **acrylates**, reaction products with C14-18 monoamines 103-11-7DP, 2-Ethylhexyl **acrylate**, polymers with maleic anhydride and C16-18-α-olefins and **styrene**, reaction products with C14-18 monoamines 108-31-6DP, Maleic anhydride, polymers with α-olefins and **methacrylates** or **styrene**, reaction products with C14-18 monoamines **142-90-5DP**, Lauryl **methacrylate**, polymers with maleic anhydride and C22-30-α-olefins, reaction products with C14-18 monoamines 2170-03-8DP, Itaconic anhydride, polymers with C22-30-α-olefins and oleyl **methacrylate** and **styrene**, reaction products with C16-18 monoamines 13533-08-9DP, polymers with C22-30-α-olefins and oleyl **methacrylate** and **styrene**, reaction products with C16-18 monoamines 15337-59-4DP, N,N-Dioctadecyl-1,3-propanediamine, reaction products with isobutene-maleic anhydride copolymer 26426-80-2DP, Isobutene-maleic anhydride copolymer, reaction products with N,N-dioctadecyl-1,3-propanediamine **195325-14-5DP**, reaction

products with C18 monoamines
RL: MOA (Modifier or additive use); **PNU (Preparation, unclassified)**; **PREP (Preparation)**; USES (Uses)
(**additives**; fuel oil compns. containing)

L25 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:429371 HCAPLUS
DOCUMENT NUMBER: 127:52179
TITLE: Water-thinned water- and oil-repellent compositions having excellent stability insensitive to the presence of additives and impurities
INVENTOR(S): Tamura, Masayuki; Kawabe, Maki; Funaki, Chu
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09118877	A	19970506	JP 1995-276013	199510 24
JP 3744034	B2	20060208	<--	
PRIORITY APPLN. INFO.:			JP 1995-276013	199510 24
			<--	

OTHER SOURCE(S): MARPAT 127:52179
AB The title compns. for nylon fabrics, etc., contain (A) polyfluoroalkyl group-containing (meth)**acrylate** unit-containing polymers and surfactants containing cationic surfactants containing cationic N and ≥5oxyalkylene units, nonionic surfactants, and other cationic surfactants. CnF2n+1CH2CH2O2CCH:CH2 (n = 6-16, average 9) 154, stearyl **acrylate** 95, 2-hydroxyethyl **acrylate** 7.7, stearyl mercaptan 0.77, polyethylene glycol octylphenyl ether 18.5, stearyltrimethylammonium chloride 2.7, RN+(CH2Ph)[(CH2CH2O)15]2 Cl- (R = tallow alkyl) 5.3, water 307.6, dipropylene glycol monomethyl ether 141, and azobis(dimethylisobutyramidine) hydrochloride 0.5 g were autoclaved under N at 60° for 6 h to give a 38%-solids white emulsion of particle diameter 0.08 μm.
IT **4813-57-4DP**, Stearyl **acrylate**, fluorine-containing **acrylic** copolymers
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(water-thinned water- and oil-repellent compns. having excellent stability insensitive to the presence of **additives** and impurities)
RN 4813-57-4 HCAPLUS
CN 2-Propenoic acid, octadecyl ester (CA INDEX NAME)



IC ICM C09K003-18
ICS B01F017-52; C08L033-16; D06M015-277
CC 40-9 (Textiles and Fibers)
ST **acrylic** emulsion water oil repellent emulsifier; nylon water oil repellent
IT 75-01-4DP, fluorine-containing **acrylic** copolymers 79-10-7DP, 2-Propenoic acid, fluorine-containing alkyl esters, polymers, uses 97-90-5DP, fluorine-containing **acrylic** copolymers 101-43-9DP, Cyclohexyl **methacrylate**, fluorine-containing **acrylic** copolymers 106-91-2DP, fluorine-containing **acrylic** copolymers 818-61-1DP, fluorine-containing **acrylic** copolymers 924-42-5DP, fluorine-containing **acrylic** copolymers 2680-03-7DP, fluorine-containing **acrylic** copolymers 2915-53-9DP, fluorine-containing **acrylic** copolymers 4098-71-9DP, IPDI, fluorine-containing **acrylic** copolymers **4813-57-4DP**, Stearyl **acrylate**, fluorine-containing **acrylic** copolymers 58916-75-9DP, Ethylene oxide-propylene oxide copolymer monomethacrylate, fluorine-containing **acrylic** copolymers
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(water-thinned water- and oil-repellent compns. having excellent stability insensitive to the presence of **additives** and impurities)

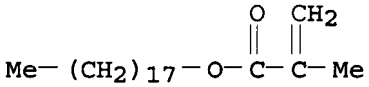
L25 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:567696 HCAPLUS
DOCUMENT NUMBER: 125:255282
TITLE: Study on synthesis and application of polymer dispersion for cement modifier (II) -waterproofing effect on cement mortar using **acrylic** copolymer-
AUTHOR(S): Kim, Hong-Dai; Kim, Young-Geun; Kim, Seung-Jin; Park, Hong-Soo
CORPORATE SOURCE: Korea Institute of Construction Materials, Seoul, 152-023, S. Korea
SOURCE: Kongop Hwahak (**1996**), 7(4), 679-690
CODEN: KOHWE9; ISSN: 1225-0112
PUBLISHER: Korean Society of Industrial and Engineering Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB **Acrylic** copolymer was synthesized from 2-dimethylaminoethyl **methacrylate** and alkylmethacrylate containing long chain hydrocarbon groups. To facilitate emulsification in water, **acrylic** copolymer was treated with acetic acid, and therefore acetated **acrylic** copolymer was produced. Acetated **acrylic** copolymer was perfectly emulsified in water and showed increased emulsion stability. Polymer as a cement dispersion agent(PDCM-PSD) was prepared by blending the newly synthesized acetated **acrylic** copolymer with sodium gluconate, oleic acid, and triethanolamine. The applicability of the blended polymer was examined, and it was found that the effects on dispersion and water-proofing (0.3.apprx.0.5) were excellent.

IT **25267-71-4P 32360-05-7P**, Stearyl **Methacrylate**
RL: PRP (Properties); **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(dispersion/waterproofing agent; synthesis and dispersion/waterproofing effects of **acrylic** copolymer **additive** for cement mortar)

RN 25267-71-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

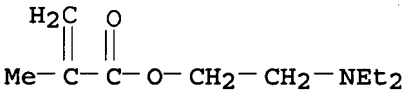
CM 1

CRN 32360-05-7
CMF C22 H42 O2

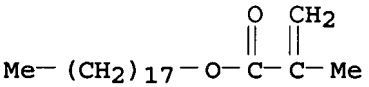


CM 2

CRN 105-16-8
CMF C10 H19 N O2



RN 32360-05-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, octadecyl ester (CA INDEX NAME)



CC 58-2 (Cement, Concrete, and Related Building Materials)
ST cement mortar **acrylic** copolymer waterproofing additive; waterproofing agent **acrylic** copolymer cement mortar; dispersing agent **acrylic** copolymer cement mortar
IT Dispersing agents
(**acrylic** copolymer; synthesis and dispersion/waterproofing effects of **acrylic** copolymer additive for cement mortar)
IT Mortar
(cement; synthesis and dispersion/waterproofing effects of **acrylic** copolymer additive for cement mortar)
IT Waterproofing
(agents, **acrylic** copolymer; synthesis and dispersion/waterproofing effects of **acrylic** copolymer additive for cement mortar)
IT 102-71-6P, Ethanol, 2,2',2''-nitrilotris-, preparation 105-16-8P,

2-Diethylaminoethyl **methacrylate** 112-80-1P, Oleic acid, preparation 527-07-1P, Sodium gluconate **25267-71-4P** **32360-05-7P**, Stearyl **Methacrylate**
RL: PRP (Properties); **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)** ; USES (Uses)
(dispersion/waterproofing agent; synthesis and dispersion/waterproofing effects of **acrylic** copolymer **additive** for cement mortar)

L25 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:184069 HCAPLUS
DOCUMENT NUMBER: 124:211516
TITLE: Preparation of polymeric auxiliary for manufacturing cosmetics
INVENTOR(S): Yu, Xuxiang; Chen, Jinminbg; Ma, Xiaoyi
PATENT ASSIGNEE(S): Huadong Science and Engineering Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

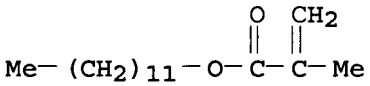
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1109068	A	19950927	CN 1994-114077	19941230

PRIORITY APPLN. INFO.: CN 1994-114077 19941230

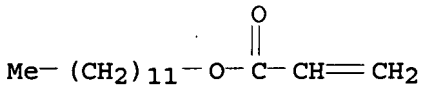
AB A polymeric auxiliary for manufacturing cosmetics is prepared with alkyl **methacrylate** 20-60, alkyl **acrylate** 25-50, unsatd. fatty acids 10-30 and unsatd. long-chain alkyl esters 0-20 weight%. The polymeric auxiliary exhibits film-forming activity, durability, high water solubility and good miscibility with organic solvents and, thus, is suitable for manufacturing cosmetics (no example given). Thus, Bu **methacrylate**, Et **acrylate**, and **methacrylic** acid were copolymd. to give a polymeric auxiliary.

IT **142-90-5DP**, Dodecyl **methacrylate**, copolymers
2156-97-0DP, Dodecyl **acrylate**, copolymers
174702-53-5P
RL: BUU (Biological use, unclassified); **SPN (Synthetic preparation)**; BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of polymeric **auxiliary** for manufacturing cosmetics)

RN 142-90-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester (CA INDEX NAME)



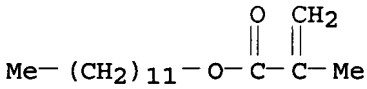
RN 2156-97-0 HCAPLUS
CN 2-Propenoic acid, dodecyl ester (CA INDEX NAME)



RN 174702-53-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

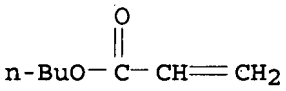
CM 1

CRN 142-90-5
CMF C16 H30 O2



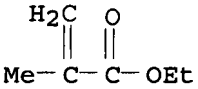
CM 2

CRN 141-32-2
CMF C7 H12 O2



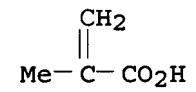
CM 3

CRN 97-63-2
CMF C6 H10 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM C08F220-68
ICS C08F220-10
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 38
IT 79-10-7DP, **Acrylic** acid, copolymers 79-41-4DP, **Methacrylic** acid, copolymers 96-33-3DP, Methyl **acrylate**, copolymers 101-43-9DP, Cyclohexyl **methacrylate**, copolymers 103-11-7DP, 2-Ethylhexyl **acrylate**, copolymers 106-63-8DP, Isobutyl **acrylate**, copolymers 140-88-5DP, Ethyl **acrylate**, copolymers 141-32-2DP, Butyl **acrylate**, copolymers **142-90-5DP**, Dodecyl **methacrylate**, copolymers 688-84-6DP, 2-Ethylhexyl **methacrylate**, copolymers **2156-97-0DP**, Dodecyl **acrylate**, copolymers 2998-23-4DP, Amyl **acrylate**, copolymers 3066-71-5DP, Cyclohexyl **acrylate**, copolymers 26715-43-5P 174702-52-4P **174702-53-5P** 174702-54-6P
RL: BUU (Biological use, unclassified); **SPN (Synthetic preparation)**; BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of polymeric **auxiliary** for manufacturing cosmetics)

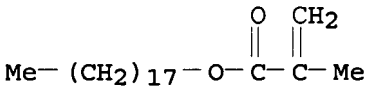
L25 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:978205 HCAPLUS
DOCUMENT NUMBER: 124:119310
TITLE: Tribopolymerization - type additives for lubricants. Part I. C12-C18 alkyl methacry'lates
AUTHOR(S): Kempinski, Roman; Kedzierska, Ewa; Kardasz, Krystyna; Wilkanowicz, Lech; Konopka, Maria
CORPORATE SOURCE: Inst. Chemii, Politechnika Warszawaska, Plock, Pol.
SOURCE: Tribologia (**1995**), 26(3), 277-98
CODEN: TRYBDE; ISSN: 0208-7774
PUBLISHER: Oficyna Wydawnicza SIMPRESS
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Potential polymer-forming compds. called tribopolymn. additives have been studied recently as friction modifiers and anti-wear additives. Tribopolymn. is defined as planned and continuous formation of protective polymeric films directly on rubbing surfaces by the use of minor concns. of selected monomers capable of forming polymer films "in situ". Determination of chemical changes of selected **methacrylic** esters in tribol. system and their anti-wear and anti-friction effectiveness was the main purpose of the studies. The investigated **methacrylates** improved mentioned above properties comparing with pure base oil in the tests performed using a pin-on-disk device. Tribopolymn. of the **methacrylates**, as well as their reactions with the rubbing surfaces, were confirmed by FTIR microspectrometry method.
IT **25639-21-8P**, Octadecyl **methacrylate** homopolymer **25719-52-2P**, Dodecyl **methacrylate** homopolymer **25986-80-5P**, Hexadecyl **methacrylate** homopolymer **30525-99-6P**, Tetradecyl **methacrylate** homopolymer
RL: MOA (Modifier or additive use); **SPN (Synthetic**

preparation); **PREP (Preparation)**; USES (Uses)
(friction-induced in-situ formation of polymethacrylate type **additives** for lubricants)

RN 25639-21-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, homopolymer (CA INDEX NAME)

CM 1

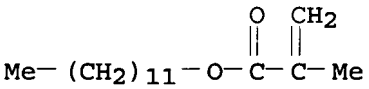
CRN 32360-05-7
CMF C22 H42 O2



RN 25719-52-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, homopolymer (CA INDEX NAME)

CM 1

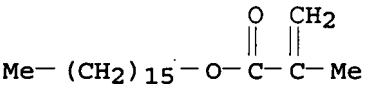
CRN 142-90-5
CMF C16 H30 O2



RN 25986-80-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, homopolymer (CA INDEX NAME)

CM 1

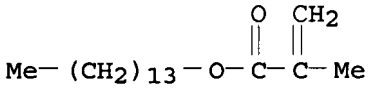
CRN 2495-27-4
CMF C20 H38 O2



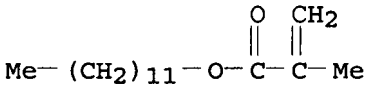
RN 30525-99-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, tetradecyl ester, homopolymer (CA INDEX NAME)

CM 1

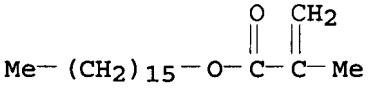
CRN 2549-53-3
CMF C18 H34 O2



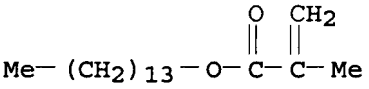
IT **142-90-5**, Dodecyl **methacrylate 2495-27-4**
, Hexadecyl **methacrylate 2549-53-3**, Tetradecyl
methacrylate 32360-05-7, Octadecyl
methacrylate
RL: MOA (Modifier or additive use); PRP (Properties); RCT
(Reactant); RACT (Reactant or reagent); USES (Uses)
(properties of C12-C18 alkyl **methacrylates** as
tribopolymn. - type **additives** for lubricants)
RN 142-90-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester (CA INDEX NAME)



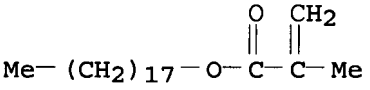
RN 2495-27-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, hexadecyl ester (CA INDEX NAME)



RN 2549-53-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, tetradecyl ester (CA INDEX NAME)



RN 32360-05-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, octadecyl ester (CA INDEX NAME)



CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 37
ST **methacrylate** polymg additive antiwear lubricant;
polymethacrylate additive lubricant steel
IT Lubricating grease additives
(antiwear, properties of C12-C18 alkyl **methacrylates** as
tribopolymn. - type additives for lubricants)
IT 544-76-3, Hexadecane
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(base oil; properties of C12-C18 alkyl **methacrylates** as

tribopolymn. - type additives for lubricants)

IT **25639-21-8P**, Octadecyl **methacrylate** homopolymer
25719-52-2P, Dodecyl **methacrylate** homopolymer
25986-80-5P, Hexadecyl **methacrylate** homopolymer
30525-99-6P, Tetradecyl **methacrylate** homopolymer
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(friction-induced in-situ formation of polymethacrylate type **additives** for lubricants)

IT **142-90-5**, Dodecyl **methacrylate** **2495-27-4**, Hexadecyl **methacrylate** **2549-53-3**, Tetradecyl **methacrylate** **32360-05-7**, Octadecyl **methacrylate**
RL: MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(properties of C12-C18 alkyl **methacrylates** as tribopolymn. - type **additives** for lubricants)

IT 12597-69-2, Steel, uses
RL: NUU (Other use, unclassified); USES (Uses)
(properties of C12-C18 alkyl **methacrylates** as tribopolymn. - type additives for lubricants on)

L25 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:216123 HCAPLUS
DOCUMENT NUMBER: 110:216123
TITLE: Polyfluorinated compounds, their preparation and their use as additives for lubricants
INVENTOR(S): Germanaud, Laurent; Hermant, Marc
PATENT ASSIGNEE(S): Atochem S. A., Fr.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 296935	A1	19881228	EP 1988-401454	19880613
			<--	
EP 296935	B1	19910116		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2616783	A1	19881223	FR 1987-8663	19870619
			<--	
FR 2616783	B1	19891006		
CA 1308738	C	19921013	CA 1988-568743	19880606
			<--	
US 4859357	A	19890822	US 1988-204602	19880609
			<--	
AT 60049	T	19910215	AT 1988-401454	19880613

				13
			<--	
AU 8818102	A	19881222	AU 1988-18102	
				198806
				17
			<--	
AU 603682	B2	19901122		
ZA 8804336	A	19890329	ZA 1988-4336	
				198806
				17
			<--	
JP 01319460	A	19891225	JP 1988-152093	
				198806
				20
			<--	
JP 04016459	B	19920324		
PRIORITY APPLN. INFO.:			FR 1987-8663	A
				198706
				19
			<--	
			EP 1988-401454	A
				198806
				13
			<--	

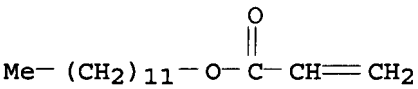
OTHER SOURCE(S): CASREACT 110:216123; MARPAT 110:216123

AB The antiwear additives RFXN(CH2CHR1OH)(CH2CHR2COOR3), where RF is a perfluorinated radical, X is a bivalent (CH2CF2)a(CH2)b, CF(:)CHCH2, or CFHCH2 CH2, a is an integer between 0 and 10, b is an integer between 1 and 4 but is 2 if a is not 0, R1 is H or an alkyl radical, R2 is H or Me, and R3 is an alkyl radical, are prepared by condensation of an aminoalc. [RFXNHCH2CH(R1)OH] with an unsatd. carboxylic acid alkyl ester [CH2(:)C(R2)COOR3].

IT **2156-97-0DP**, Lauryl **acrylate**, reaction products with polyfluorinated amino alcs.
RL: **PREP (Preparation)**
(preparation of, lubricant antiwear **additives**)

RN 2156-97-0 HCAPLUS

CN 2-Propenoic acid, dodecyl ester (CA INDEX NAME)



IC ICM C07C101-18
ICS C10M133-08

ICI C10N030-06

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

IT Alcohols, compounds
(perfluoroalkylamino, reaction products, with **acrylic** esters, preparation of, lubricant antiwear additives)

IT 96-33-3DP, reaction products with polyfluorinated amino alcs.
103-11-7DP, reaction products with polyfluorinated amino alcs.
141-32-2DP, reaction products with polyfluorinated amino alcs.
2156-97-0DP, Lauryl **acrylate**, reaction products with polyfluorinated amino alcs.
RL: **PREP (Preparation)**
(preparation of, lubricant antiwear **additives**)

L25 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:483522 HCAPLUS
DOCUMENT NUMBER: 95:83522
TITLE: Macromolecular additive for lubricants
INVENTOR(S): Popescu, Maria; Petre, Constantin; Ocneanu, Ion; Baliu, Sotir; Popescu, Stefan; Iordache, Gheorghe
PATENT ASSIGNEE(S): Institutul de Cercetari si Proiectari Tehnologice pentru Rafinarii si Instalatii Petrochimice, Rom.
SOURCE: Rom., 2 pp.
CODEN: RUXXA3
DOCUMENT TYPE: Patent
LANGUAGE: Romanian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 67152	A2	19790715	RO 1974-77619	197402 12

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PRIORITY APPLN. INFO.: RO 1974-77619 A 197402 12

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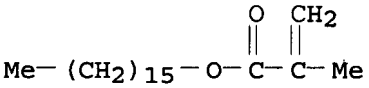
AB A **methacrylate** ester copolymer viscosity-index improver and pour-point depressant for lubricating oils was manufactured Thus, 100 g cetyl **methacrylate** was polymerized for 1-2 h at 90° in the presence of 0.2 g Bz2O2 and the product was copolymd. with **methacrylate** obtained from C10-11 alcs. at 90° in the presence of 0.2 g Bz2O2. The final polymerization product was diluted with mineral oil (viscosity 3-5° Engler at 50° and heated to 110° to decompose the remaining Bz2O2.

IT **2495-27-4DP**, copolymer with alkyl **methacrylate** esters
RL: **PREP (Preparation)**
(block, lubricating-oil **additives**, manufacture of)
RN 2495-27-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, hexadecyl ester (CA INDEX NAME)



IC C10M001-00; C10M003-00
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 35
ST **methacrylate** copolymer lubricant additive; polymer **acrylic** lubricant additive
IT Lubricating oil additives
(pour point depressants-viscosity index improvers, **methacrylate** copolymers, block, manufacture of)
IT 79-41-4DP, esters with C10-11 alcs., copolymers with cetyl **methacrylate** **2495-27-4DP**, copolymer with alkyl **methacrylate** esters

RL: **PREP (Preparation)**
(block, lubricating-oil **additives**, manufacture of)

L25 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:507112 HCAPLUS
DOCUMENT NUMBER: 65:107112
ORIGINAL REFERENCE NO.: 65:19912b-e
TITLE: Aminomethanephosphonate copolymers
INVENTOR(S): Sims, Homer J.; Bauer, La Verne N.; Preuss, Albert F., Jr.
PATENT ASSIGNEE(S): Rohm & Haas Co.
SOURCE: 10 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3268450		19660823	US 1965-460572	19630515

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PRIORITY APPLN. INFO.: US 19630515

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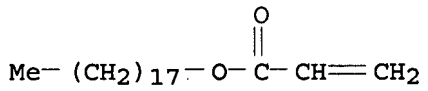
AB Preparation of copolymers containing aminomethanephosphonates R1R2C[P(O)(OR3)2] NR4CH2CH2-OR5, for imparting dispersant and anti-rust properties, pour point depressing action, and improvements in viscosity to lubricating and fuel compns. is described. Thus, a mixture containing 300 parts lauryl myristyl **methacrylate**, 40 parts toluene, and 0.68 part tert-Bu perbenzoate (85%) is added to a flask at 130°. The lauryl myristyl **methacrylate** is the ester prepared from a com. alc. containing 4% decanol, 66.4% dodecanol, 27.2% tetradecanol, and 2.4% hexadecanol. The bath temperature is maintained at 120-30° for 1.67 h. when a second monomer mixture containing 60 parts lauryl myristyl **methacrylate**, 40 parts tert-butylaminoethyl **methacrylate**, and 0.21 part tert-Bu perbenzoate (85%) is added. Addns. of 1.16 parts tert-Bu perbenzoate (10%) in 20 parts toluene are made at 3.67, 5.67, 6.33, and 7.0 h. resp. A solution of 1.74 parts of this same catalyst solution in 20 parts toluene is added in 5 h. When the reaction is considered complete at 7.0 h. 100 parts toluene is added. The resulting toluene solution is 52% copolymer, representing a polymer yield of 82%. A sample (179 parts) of the 52% copolymer is further diluted with 150 parts toluene. Aqueous CH2O (4.05 parts of 37% concentration) is added dropwise during 30 min. with stirring. The mixture is heated at 40° for 30-40 min. Di-Me phosphite (5.5 parts) is then added in 30 min. The reaction is completed by heating 1 h. at 40°. The H2O from the aqueous CH2O and from the reaction is removed by azeotropic distillation with toluene at 30-50 mm. The reaction mixture is kept at 35-40° during the drying step. The solvent is removed giving a final weight of 237 parts of copolymer corresponding to 41.5% yield.

IT **4813-57-4P**, **Acrylic** acid, octadecyl ester
RL: **PREP (Preparation)**
(aminomethanephosphonate copolymer manufacture from, **additive** for fuels and lubricants by)

RN 4813-57-4 HCAPLUS
CN 2-Propenoic acid, octadecyl ester (CA INDEX NAME)



INCL 252049900
CC 27 (Petroleum and Petroleum Derivatives)
IT 79-41-4P, **Methacrylic** acid 80-62-6P, Methyl **methacrylate** 97-88-1P, **Methacrylic** acid, butyl ester 111-63-7P, Stearic acid, vinyl ester 140-76-1P, 2-Picoline, 5-vinyl- 614-45-9P, Peroxybenzoic acid, tert-butyl ester 868-85-9P, Methyl phosphonate, (MeO)2HPO 1330-61-6P, **Acrylic** acid, isodecyl ester 3658-48-8P, 1-Hexanol, 2-ethyl-, phosphonate 3775-90-4P, **Methacrylic** acid, 2-(tert-butylamino)ethyl ester **4813-57-4P**, **Acrylic** acid, octadecyl ester 14206-21-4P, **Acrylic** acid, 2-(tert-butylamino)ethyl ester 14206-24-7P, Ethanol, 2-[(1,1,3,3-tetramethylbutyl)amino]-, **methacrylate** 14298-64-7P, Ethanol, 2-(tridecylamino)-, **methacrylate** (ester) 29964-84-9P, **Methacrylic** acid, isodecyl ester 30105-10-3P, 1-Hexanol, chloro-, phosphonate
RL: **PREP (Preparation)**
(aminomethanephosphonate copolymer manufacture from, **additive** for fuels and lubricants by)
IT 123-20-6P, Butyric acid, vinyl ester 762-04-9P, Ethyl phosphonate, (EtO)2HPO 142600-07-5P, Isodecyl alcohol, **methacrylate**
RL: PREP (Preparation)
(aminomethanephosphonate copolymer manufacture from, as additive for fuels and lubricants)
IT 3775-90-4P, Ethanol, 2-(tert-butyiamino)-, methacryiate 4167-12-8P, Ethanol, 2-chloro-, phosphorate 4167-12-8P, Ethanol, 2-chloro-, phosphonates 14206-21-4P, Ethanol, 2-(tert-butyiamino)-, **acrylate**
RL: PREP (Preparation)
(aminomethanephosphonate polymer manufacture from, additive for fuels and lubricants by)
IT 79-41-4, **Methacrylic** acid, esters with di-Me [tert-butyl(2-hydroxyethyl)amino]methylphosphonate, copolymers
(containing, as additives for lubricants and fuels)
IT 79-10-7, **Acrylic** acid, esters with diethyl[[tert-butyl(2-hydroxyethyl)amino]methyl]phosphonate
(copolymers contg, as additives for lubricants and fuels)
IT 79-41-4, **Methacrylic** acid, esters with di-Me [[(2-hydroxyethyl)tridecylamino]methyl]phosphonate 79-41-4, **Methacrylic** acid, esters with bis(ethylhexyl) [tert-butyl(2-hydroxyethyl)amino]methylphosphonate 79-41-4, **Methacrylic** acid, esters with bis(2-chloroethyl) [tert-butyl(2-hydroxyethyl)amino]methylphosphonate 14235-58-6, **Methacrylic** acid, ester with di-Et [(2-hydroxyethyl)(1,1,3,3-tetramethylbutyl)amino]methylphosphonate
(copolymers containing, as additives for lubricants and fuels)
IT 14235-57-5, **Methacrylic** acid, ester with di-Et [tert-butyl(2-hydroxyethyl)amino]methylphosphonate
(copolymers with di-Et [tert-butyl(2-hydroxyethyl)containing, as additives for lubricants and fuels)
IT 14206-25-8P, Phosphonic acid, [tert-butyl(2-

hydroxyethyl)amino]methyl-, dimethyl ester, **methacrylate** 14235-55-3P, Phosphonic acid, [[(2-hydroxyethyl)tridecylamino]methyl]-, dimethyl ester, **methacrylate** 14235-56-4P, Phosphonic acid, [tert-butyl(2-hydroxyethyl)amino]methyl-, bis(2-chloroethyl) ester, **methacrylate** 15622-54-5P, Phosphonic acid, [tert-butyl(2-hydroxyethyl)amino]methyl-, diethyl ester, **acrylate**
RL: PREP (Preparation)
(preparation of)

=> d l26 ibib abs fhitstr hitind 1-53

L26 ANSWER 1 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:535761 HCAPLUS
DOCUMENT NUMBER: 143:289136
TITLE: Multi-functional additive compositions for low sulfur diesel oil
INVENTOR(S): Lin, Jianmin
PATENT ASSIGNEE(S): Sinopec Crop., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1524934	A	20040901	CN 2003-105393	20030228

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PRIORITY APPLN. INFO.: CN 2003-105393 20030228

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AB The title additive compns. contain the following two components: (1) poly(ethylene-vinyl acetate) (MW = 1000-2500), and (2) esterification or amination derivs. of alkyl (C6-C12) acrylate-maleic anhydride copolymer (MW = 500-10000). The epoxide esterification derivs. of alkyl (C6-C12) acrylate-maleic anhydride copolymer are reaction products of alkyl (C6-C12) acrylate-maleic anhydride copolymer, alkyl alc. (C6-C22), and epoxide or polyol at 50-160ÅC. The epoxide amination derivs. of alkyl (C6-C12) acrylate-maleic anhydride copolymer are reaction products of alkyl (C6-C12) acrylate-maleic anhydride copolymer, alkyl amine (C6-C22), and polyene polyamine or cycloalkyl amine or heterocyclic amine at 50-160ÅC. The weight ratio of component 1 and 2 is 1 : 0.1-10. The additive compns. can improve the wear resistance, fluidity and lubricating property of diesel oil, and can lower the cold filter plugging point (CFPP) and solidification point of diesel oil (SP).

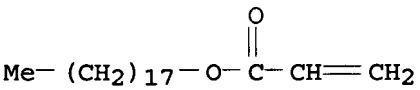
IT **134590-50-4P**, Octadecyl acrylate-maleic anhydride copolymer
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(multi-functional **additive** compns. for low sulfur diesel oil)

RN 134590-50-4 HCAPLUS

CN 2-Propenoic acid, octadecyl ester, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

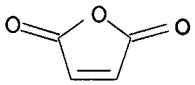
CM 1

CRN 4813-57-4
CMF C21 H40 O2



CM 2

CRN 108-31-6
CMF C4 H2 O3



IC ICM C10M145-14
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
IT **134590-50-4P**, Octadecyl acrylate-maleic anhydride copolymer
186428-56-8P
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(multi-functional **additive** compns. for low sulfur diesel oil)

L26 ANSWER 2 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:479712 HCAPLUS
DOCUMENT NUMBER: 140:424103
TITLE: Manufacture of polymer additives for improving the flow of natural gas condensates
INVENTOR(S): Vukovic, Radivoje; Erceg, Ana; Bogdanic, Grozdana
PATENT ASSIGNEE(S): INA-Industrija Nafte, d.d., Croatia
SOURCE: Croat. Pat. Appl., 14 pp.
CODEN: HRXXB9
DOCUMENT TYPE: Patent
LANGUAGE: Croatian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HR 980606	A1	20000630	HR 1998-606	199811 24
HR 980606	B1	20020630	<--	

PRIORITY APPLN. INFO.: HR 1998-606 199811

24

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AB Copolymers and terpolymers of C10-25 alkyl (meth)acrylates with styrene and (meth)acrylic acid were manufactured as additives for the title purpose. A typical additive having weight-average mol. weight Mw 130,200 and number-average mol. weight Mn 47,600 was manufactured by heating for 5.5 h at 80° under N a mixture of octadecyl methacrylate 62.3, styrene 1.17, acrylic acid 0.32 and AIBN 0.32 parts in 35.9 parts PhMe.

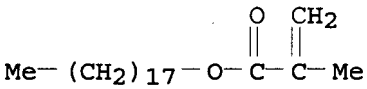
IT **25639-21-8P**, Octadecyl methacrylate polymer
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of polymer **additives** for improving flow of natural gas condensates)

RN 25639-21-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 32360-05-7
CMF C22 H42 O2



IC ICM C08F220-18
ICS C08F212-08

CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 51

IT **25639-21-8P**, Octadecyl methacrylate polymer **25986-77-0P**, Octadecyl acrylate polymer **27401-06-5P**, Methacrylic acid-Octadecyl methacrylate copolymer **27756-15-6P**, Acrylic acid-Octadecyl methacrylate copolymer **30283-44-4P**, Octadecyl acrylate-Styrene copolymer **36120-03-3P**, Acrylic acid-Octadecyl acrylate copolymer **63083-24-9P**, Methacrylic acid-Octadecyl methacrylate-Styrene copolymer **63175-48-4P**, Acrylic acid-Octadecyl methacrylate-Styrene copolymer **152336-72-6P**, Acrylic acid-Octadecyl acrylate-Styrene copolymer
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of polymer **additives** for improving flow of natural gas condensates)

L26 ANSWER 3 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:902410 HCAPLUS
DOCUMENT NUMBER: 139:365824
TITLE: Manufacture of polytetrafluoroethylene mixed powders and odorless thermoplastic resin compositions therefrom
INVENTOR(S): Ueno, Takafumi; Honda, Soichiro; Osuka, Masahiro
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003327709	A	20031119	JP 2002-133229	20020508

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PRIORITY APPLN. INFO.: JP 2002-133229 20020508

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AB The mixed powders, comprising (A) polytetrafluoroethylene (PTFE) and (B) organic polymers, are manufactured by coagulation of A/B mixture-containing dispersions by Ca(OAc)2. Thermoplastic resin compns. containing the powders as additives can be molded without odor. Thus, dodecyl methacrylate-Me acrylate-Me methacrylate copolymer was mixed with Fluon AD 936 (PTFE) to give a dispersion, which was coagulated by Ca(OAc)2, filtered, and dried to give powders. The powders were mixed with polypropylene and extruded to give a pellet showing less odor.

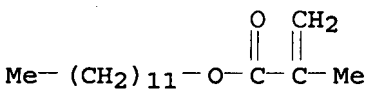
IT **54115-00-3P**, Dodecyl methacrylate-methyl acrylate-methyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(manufacture of polytetrafluoroethylene mixed powders as **additives** for thermoplastic resin compns. showing no odor when molding)

RN 54115-00-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with methyl 2-methyl-2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

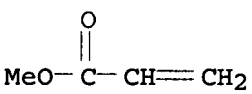
CM 1

CRN 142-90-5
CMF C16 H30 O2



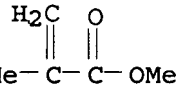
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08J003-16
ICS C08L027-18; C08L101-00
CC 37-6 (Plastics Manufacture and Processing)
IT 9011-87-4P, Methyl acrylate-methyl methacrylate copolymer
54115-00-3P, Dodecyl methacrylate-methyl acrylate-methyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(manufacture of polytetrafluoroethylene mixed powders as **additives** for thermoplastic resin compns. showing no odor when molding)

L26 ANSWER 4 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:902409 HCAPLUS
DOCUMENT NUMBER: 139:382215
TITLE: Manufacture of discoloration-free polytetrafluoroethylene mixed powders and thermoplastic resin compositions therefrom
INVENTOR(S): Ueno, Takafumi; Honda, Soichiro; Osuka, Masahiro
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003327708	A	20031119	JP 2002-133228	20020508 <--
JP 3735316	B2	20060118		
PRIORITY APPLN. INFO.:			JP 2002-133228	20020508 <--

AB The mixed powders, comprising (A) polytetrafluoroethylene (PTFE) and (B) organic polymers, are manufactured by emulsion polymerization in the presence of emulsifiers chosen from dipotassium alkenyl succinate, Na 1,4-dicyclohexyl sulfonate, Na dioctyl sulfosuccinate, and sodium laurate for preparing B. Thermoplastic resin compns. containing the powders as additives form moldings with good appearance. Thus, dodecyl methacrylate-Me acrylate-Me methacrylate copolymer prepared in the presence of Latemul ASK (dipotassium alkenylsuccinate) was mixed with Fluon AD 936 (PTFE) to give a dispersion. Me acrylate and Me methacrylate were polymerized in the dispersion, solidified, filtered,

and dried to give powders showing no discoloration after 6 mo. and good appearance after press molded.

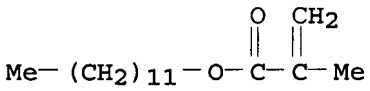
IT **54115-00-3P**, Dodecyl methacrylate-methyl acrylate-methyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(manufacture of discoloration-free polytetrafluoroethylene mixed powders as **additives** for thermoplastic resin compns. by emulsion polymerization)

RN 54115-00-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with methyl 2-methyl-2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

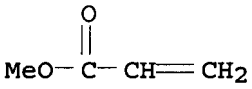
CM 1

CRN 142-90-5
CMF C16 H30 O2



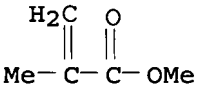
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08J003-12
ICS C08F002-24; C08L027-18; C08L101-00

CC 37-6 (Plastics Manufacture and Processing)

IT 9011-87-4P, Methyl acrylate-methyl methacrylate copolymer
54115-00-3P, Dodecyl methacrylate-methyl acrylate-methyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(manufacture of discoloration-free polytetrafluoroethylene mixed powders as **additives** for thermoplastic resin compns. by

emulsion polymerization)

L26 ANSWER 5 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:852385 HCAPLUS
DOCUMENT NUMBER: 140:166375
TITLE: Copolymeric succinamic acids as antiwear additives: synergistic and adverse effects
AUTHOR(S): Mehrotra, A. K.; Nandi, T.; Agnihotri, R. K.; Mathur, G. N.
CORPORATE SOURCE: DMSRDE, Kanpur, India
SOURCE: Lubrication Science (2003), 15(4), 341-350
CODEN: LUSCEN; ISSN: 0954-0075
PUBLISHER: Leaf Coppin Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

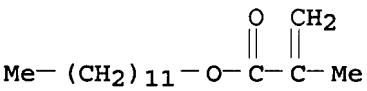
AB Copolymeric succinamic acid (COSMA) additives have been synthesized in the laboratory and evaluated for their antiwear performance, both alone and in combination with zinc dialkyldithiophosphate (ZDDP) in HVI light neutral oil. COSMA additives show antiwear behavior and, in combination with ZDDP, exhibit a good synergistic effect, reducing the wear-scar diameter by 60% and increasing the initial seizure load from 50 kg to 85-95 kg.

IT **27456-17-3DP**, reaction products with diethylamine
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(copolymeric succinamic acids as antiwear **additives**, synergistic and adverse effects)

RN 27456-17-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

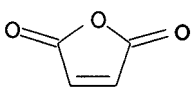
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

CRN 108-31-6
CMF C4 H2 O3



CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
IT 101-83-7DP, Dicyclohexylamine, reaction products with copolymeric succinamic acids 109-89-7DP, Diethylamine, reaction products with copolymeric succinamic acids 111-92-2DP, Dibutylamine, reaction products with copolymeric succinamic acids 638-32-4DP, Succinamic

acid, polymers 27456-04-8DP, reaction products with diethylamine **27456-17-3DP**, reaction products with diethylamine **35829-04-0DP**, reaction products with diethylamine 38886-20-3DP, Piperidinamine, reaction products with copolymeric succinamic acids 57087-02-2DP, reaction products with diethylamine 124332-08-7DP, Morpholinamine, reaction products with copolymeric succinamic acids 199542-58-0DP, reaction products with diethylamine **655249-63-1DP**, reaction products with dibutylamine **655249-63-1DP**, reaction products with dicyclohexylamine **655249-63-1DP**, reaction products with diethylamine **655249-63-1DP**, reaction products with morpholinamine **655249-63-1DP**, reaction products with piperidinamine **655249-64-2DP**, reaction products with dibutylamine **655249-64-2DP**, reaction products with diethylamine **655249-65-3P**
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(copolymeric succinamic acids as antiwear **additives**, synergistic and adverse effects)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 6 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:506574 HCAPLUS
DOCUMENT NUMBER: 139:64831
TITLE: Solid pesticide formulations
INVENTOR(S): Meyer, Gerd Roland; Morschhaeuser, Roman; Zerrer, Ralf
PATENT ASSIGNEE(S): Clariant GmbH, Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10163901	A1	20030703	DE 2001-10163901 <--	200112 22
CA 2471246	A1	20030710	CA 2002-2471246 <--	200212 17
WO 2003055306	A1	20030710	WO 2002-EP14368 <--	200212 17
W: BR, CA, CN, ID, IL, JP, KR, MX, SG, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
EP 1460896	A1	20040929	EP 2002-793037 <--	200212 17
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				

PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

BR 2002015296	A	20041221	BR 2002-15296	200212 17 <--
US 2005148709	A1	20050707	US 2003-499997	200212 17 <--
PRIORITY APPLN. INFO.:			DE 2001-10163901	A 200112 22 <--
			WO 2002-EP14368	W 200212 17 <--

AB Polymers of acrylamidopropylmethylenesulfonic acid and macro monomers were prepared as pesticide formulation adjuvants. The formulations are dispersible without major agitation. The formulations are storage stable regarding temperature fluctuations and humidity (e.g. no caking). In particular the invention is suitable for wettable powders and water dispersible granules . The suspensions made of the solid formulations show increased suspensibility (floating capability) and stability.

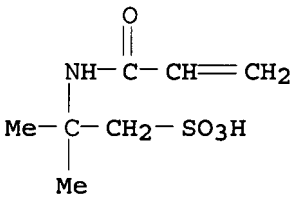
IT **551943-35-2P**
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(preparation as **adjuvant** in solid pesticide formulations)

RN 551943-35-2 HCAPLUS

CN 2-Propenoic acid, octadecyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

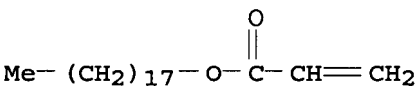
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



CM 2

CRN 4813-57-4
CMF C21 H40 O2



IC ICM A01N041-04
CC 5-4 (Agrochemical Bioregulators)
IT 79-10-7DP, Acrylic acid, esters with ethoxylated fatty acid glycol derivs., polymers with AMPS 15214-89-8DP, polymers with acrylic esters of ethoxylated fatty acid glycol derivs. **551943-35-2P**
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(preparation as **adjuvant** in solid pesticide formulations)

L26 ANSWER 7 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:133321 HCAPLUS
DOCUMENT NUMBER: 138:170674
TITLE: Acrylic polymer latex dispersions as additives for inhibiting paraffin deposits in crude oils and compositions containing same
INVENTOR(S): Baloche, Alain; Juhue, Didier; Picard, Philippe; Pou, Tong Eak; Truszkowski, Caroline
PATENT ASSIGNEE(S): Ceca S.A., Fr.
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003014170	A1	20030220	WO 2002-FR2786	20020802
			<--	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2828494	A1	20030214	FR 2001-10591	20010108
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FR 2828494	B1	20050603		
CA 2457768	A1	20030220	CA 2002-2457768	20020802
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AU 2002342951	A1	20030224	AU 2002-342951	20020802
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EP 1421123	A1	20040526	EP 2002-779606	20020802
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

CN 1564831	A	20050112	CN 2002-819930	200208 02
			<--	
US 2005085588	A1	20050421	US 2003-486655	200208 02
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CN 1919879	A	20070228	CN 2006-10107402	200208 02
			<--	
NO 2004000972	A	20040305	NO 2004-972	200403 05
			<--	
IN 2004DN00562	A	20051104	IN 2004-DN562	200403 05
			<--	
US 2006183843	A1	20060817	US 2006-334350	200601 19
			<--	
PRIORITY APPLN. INFO.:			FR 2001-10591 A	200108 08
			<--	
			CN 2002-819930 A3	200208 02
			<--	
			WO 2002-FR2786 W	200208 02
			<--	
			US 2004-486655 B1	200411 03

AB The invention concerns latex dispersions based on (co)polymers of one or several Cn alkyl (meth)acrylate monomers, n ranging between 6 and 40, and optionally one or several hardly water-soluble of (meth)acrylic and/or vinyl type, optionally one or several polar monomers selected among (meth)acrylamides and their derivs. and optionally one or several monomers selected among ethylenically unsatd. monocarboxylic or dicarboxylic acids or anhydrides. Said dispersions are obtained by free radical emulsion polymerization in the presence of water and have high solids content and good liquidity in a large range of temps. They can be used as such for inhibiting paraffin deposits contained in unrefined petroleum or diluted in one or several solvents.

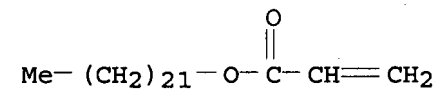
IT **25703-24-6P**, Polybehenyl acrylate
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(acrylic polymer latex dispersions as **additives** for inhibiting paraffin deposits in crude oils)

RN 25703-24-6 HCAPLUS

CN 2-Propenoic acid, docosyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 18299-85-9
CMF C25 H48 O2



IC ICM C08F020-18
ICS C08F220-18; C08F002-24; C10M145-14; C10L001-10
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 51
IT **25703-24-6P**, Polybehenyl acrylate 361380-92-9P, Norsocryl A 18-22 361381-01-3P, Norsocryl A 18-22-N-vinylpyrrolidone copolymer **475475-66-2P**, Behenyl acrylate-N-vinylpyrrolidone copolymer
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(acrylic polymer latex dispersions as **additives** for inhibiting paraffin deposits in crude oils)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

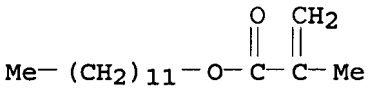
L26 ANSWER 8 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:60854 HCAPLUS
DOCUMENT NUMBER: 139:215699
TITLE: Disperse dyeing using amphiphilic cotelomers as auxiliaries
AUTHOR(S): Shosenji, Hideto; Yoshioka, Taeko; Nomura, Shingo; Okubayashi, Satoko; Sawada, Tsuyoshi
CORPORATE SOURCE: Department of Applied Chemistry + Biochemistry, Faculty of Engineering, Kumamoto University, Kumamoto, 860-8555, Japan
SOURCE: Magic World of Textiles, Book of Proceedings of the International Textile, Clothing & Design Conference, 1st, Dubrovnik, Croatia, Oct. 6-9, 2002 (**2002**), 323-328. Organising Committee ITC&ampDC 2002: Zagreb, Croatia.
CODEN: 69DLY7; ISBN: 953-96408-8-1
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Cotelomers of alkyl acrylate and acrylic acid (AES-xRnA-yAA), alkyl methacrylate and acrylic acid (AES-xRnMA-yAA)as well as styrene and acrylic acid (R6S-xSt-yAA) were examined on the properties as auxiliaries for disperse dyeing of polyester and cellulose acetate fibers with an anthraquinone type dye (KPR). Dependence of dye uptake on monomer unit ratio and d.p. of the cotelomers resembled that of degree of dispersion of the dye by the cotelomers into aqueous solution The degree of dispersion of dye in the presence of R6S-xSt-yAA was 1.5 times higher than that of AES-xRnA-yAA. R6S-xSt-yAA gave dye uptake 1.7 and 1.4 times higher than the com. auxiliary Disp-TL for Nylon-6 and cellulose acetate fiber, resp.
IT **28062-60-4P**, Acrylic acid-dodecyl methacrylate copolymer
RL: MOA (Modifier or additive use); PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)

(disperse dyeing using amphiphilic cotelomers as **auxiliaries**)

RN 28062-60-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-propenoic acid (CA INDEX NAME)

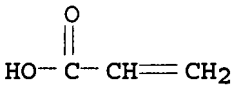
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

CRN 79-10-7
CMF C3 H4 O2



CC 40-6 (Textiles and Fibers)
Section cross-reference(s): 37
IT 25085-34-1P, Acrylic acid-styrene copolymer 25134-51-4P, Acrylic acid-2-ethylhexyl acrylate copolymer **28062-60-4P**, Acrylic acid-dodecyl methacrylate copolymer 39611-99-9P, Acrylic acid-hexyl acrylate copolymer **40840-75-3P**, Acrylic acid-dodecyl acrylate copolymer 41578-93-2P, Acrylic acid-2-ethylhexyl methacrylate copolymer 79077-72-8P, Acrylic acid-hexyl methacrylate copolymer
RL: MOA (Modifier or additive use); PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(disperse dyeing using amphiphilic cotelomers as **auxiliaries**)
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 9 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:592054 HCAPLUS
DOCUMENT NUMBER: 137:141297
TITLE: Thermoplastic resin composition, additives for improvement of moldability and compatibility, and master batch containing the additives
INVENTOR(S): Sekita, Mari; Osuka, Masahiro; Mori, Masaaki
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002220533	A	20020809	JP 2001-15848	200101 24

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PRIORITY APPLN. INFO.: JP 2001-15848 200101 24

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AB The composition, showing reduced plate-out behavior, etc., in molding, contains 100 parts of a thermoplastic resin, 0.1-20 parts of an acrylic copolymer, and 0.1-50 parts of a mixture of powdered poly(tetrafluoroethylene) (I) and an organic polymer. The additives contain an acrylic copolymer and a mixture of I and an organic polymer. The master batch contains the thermoplastic resin and the additives. Thus, 20 parts Me methacrylate was polymerized in the presence of I (Fluon AD936) dispersion (40 parts as I), 75:25 dodecyl methacrylate-Me methacrylate copolymer (II) dispersion (40 parts as II) to give mixed powder, which was blended with a copolymer prepared from Me methacrylate 50, Bu methacrylate 25, and Bu arylate 25 parts and extruded to give master pellets. Then, 100 parts polypropylene (Novatec FY4), 10 parts of the master pellets, and 0.1 part red iron oxide were mixed, pelletized, and extruded to give a uniformly colored test piece.

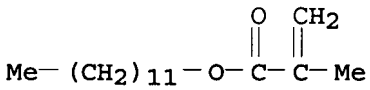
IT **30795-64-3P**, Dodecyl methacrylate-methyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(thermoplastic resin containing **additives** for improvement of moldability and compatibility)

RN 30795-64-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with methyl 2-methyl-2-propenoate (CA INDEX NAME)

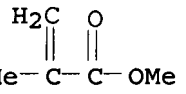
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08L101-00
ICS C08J003-22; C08L101-00; C08L033-06; C08L027-18
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38
IT 9003-07-0P, EA 7 9011-14-7P, Poly(methyl methacrylate)
25322-99-0P, Butyl acrylate-methyl methacrylate-butyl methacrylate copolymer 25767-47-9P, Butyl acrylate-styrene copolymer
30795-64-3P, Dodecyl methacrylate-methyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(thermoplastic resin containing **additives** for improvement of moldability and compatibility)

L26 ANSWER 10 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:291984 HCAPLUS
DOCUMENT NUMBER: 136:327259
TITLE: Polymeric bulking agent as additives for papermaking with improved bulk, durability, opacity, and whiteness
INVENTOR(S): Nishimori, Toshiyuki; Kubota, Kazuo; Takahashi, Hiromichi
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002115199	A	20020419	JP 2000-312136	200010 12
JP 3517200	B2	20040405		

PRIORITY APPLN. INFO.: JP 2000-312136 200010 12

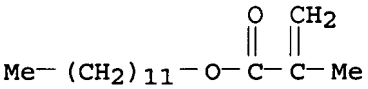
AB Title additive, characterized in that (i) standard bulk improved degree >0.02 g/cm3, (ii) standard opacity improved degree >0.5 points, and (iii) standard brightness improved degree >0.5 points, is derived from (A) nonionic unsatd. monomers having solubility parameter <10 (cal/m3)1/2, and (B) anionic or cationic monomers. Thus, an additive synthesized from acrylamide, Bu methacrylate, and dimethylaminoethyl methacrylate methochloride 2 parts was mixed with pulp slurry 100 parts, pressed, and dried to give a paper sheet, showing bulk d. 0.582 g/cm3, whiteness 84.0%, opacity 83.0%, and JIS burst factor 2.33 x 10-2 (kgf/cm2)/(g/m2).
IT **412302-87-5P**, Acrylamide-diethylaminoethyl

methacrylate-lauryl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of **additives** for papermaking with improved bulk d.)

RN 412302-87-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

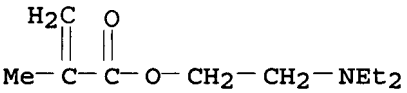
CM 1

CRN 142-90-5
CMF C16 H30 O2



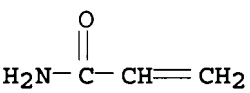
CM 2

CRN 105-16-8
CMF C10 H19 N O2



CM 3

CRN 79-06-1
CMF C3 H5 N O



IC ICM D21H021-22
ICS D21H017-37
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
IT 25135-88-0P, Acrylamide-diethylaminoethyl methacrylate-butyl acrylate copolymer 141550-70-1P 412302-86-4P, Acrylamide-diethylaminoethyl methacrylate-ethyl methacrylate copolymer **412302-87-5P**, Acrylamide-diethylaminoethyl methacrylate-lauryl methacrylate copolymer **412302-88-6P**, Acrylamide-diethylaminoethyl methacrylate-stearyl methacrylate copolymer 412302-89-7P, Acrylamide-diethylaminoethyl methacrylate-butyl methacrylate copolymer 412302-90-0P 412928-91-7P
RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered

material use); **PREP (Preparation)**; USES (Uses)
(preparation of **additives** for papermaking with improved bulk d.)

L26 ANSWER 11 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:157164 HCAPLUS
DOCUMENT NUMBER: 136:201903
TITLE: Isocyanate-containing acrylic polymers useful for additives in coatings, paints and inks as defoaming or leveling agents
INVENTOR(S): Uehara, Takao; Yamazaki, Jun; Ohira, Kiyomasa; Kawahito, Shigehiro
PATENT ASSIGNEE(S): Kusumoto Chemicals, Ltd., Japan
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1182236	A1	20020227	EP 2001-118839 <--	200108 13
EP 1182236	B1	20050413		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002066206	A	20020305	JP 2000-255720 <--	200008 25
AT 293150	T	20050415	AT 2001-118839 <--	200108 13
ES 2236099	T3	20050716	ES 2001-1118839 <--	200108 13
US 2007073023	A1	20070329	US 2006-559256 <--	200611 13
PRIORITY APPLN. INFO.:			JP 2000-255720 A <--	200008 25
			US 2001-925451 B1 <--	200108 10
			EP 2001-118839 A <--	200108 13
			US 2003-727666 B2	200312

05

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US 2004-823719 A1

200404

14

AB The additives, particularly useful for clear coatings without melamine resins as curing agent, comprise 2-50% reactive isocyanate-containing monomer (A) and 98-50% other monomer, wherein A is selected from 2-isocyanatoethyl methacrylate, 2-isocyanatoethyl acrylate and 3-isopropenyl-α,α-dimethylbenzyl isocyanate.

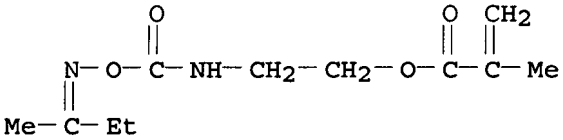
IT **401513-13-1P**, Hexadecyl methacrylate-lauryl vinyl ether-2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(362472-24-0P 362472-26-2P; isocyanate-**containing** polyacrylate useful for additives in coatings, paints and inks as defoaming or leveling agents)

RN 401513-13-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with 1-(ethenyloxy)dodecane and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

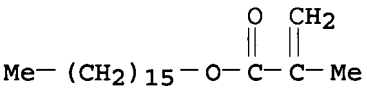
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



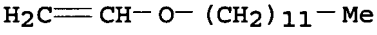
CM 2

CRN 2495-27-4
CMF C20 H38 O2



CM 3

CRN 765-14-0
CMF C14 H28 O



IC ICM C09D007-12
ICS C08F220-34
CC 42-5 (Coatings, Inks, and Related Products)
IT **401513-13-1P**, Hexadecyl methacrylate-lauryl vinyl ether-2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(362472-24-0P 362472-26-2P; isocyanate-**containing** polyacrylate useful for additives in coatings, paints and inks as defoaming or leveling agents)
IT 141-32-2DP, Butyl acrylate, polymers with methacryloxypropylpolydimethylsiloxane and 2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate 9016-00-6DP, Polydimethylsiloxane, methacryloxypropyl derivs., polymers with Bu acrylate and 2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate 31900-57-9DP, Silanediol, dimethyl-, homopolymer, methacryloxypropyl derivs., polymers with Bu acrylate and 2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate 78279-10-4DP, polymers with methacryloxypropylpolydimethylsiloxane and Bu acrylate 83729-34-4P, 2-Ethylhexyl acrylate-2-isocyanatoethyl methacrylate copolymer **120516-25-8P**, 2-Isocyanatoethyl methacrylate-octadecyl methacrylate copolymer **401513-15-3P**, Lauryl methacrylate-2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer 401513-18-6P, Butyl acrylate-isobutyl vinyl ether-2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(isocyanate-containing polyacrylate useful for **additives** in coatings, paints and inks as defoaming or leveling agents)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 12 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:830740 HCAPLUS
DOCUMENT NUMBER: 135:372470
TITLE: Preparations of acrylic polymer particles having ultrahigh molecular weight useful for plastics additives
INVENTOR(S): Smith, Robert Julian; Rice, Katherine Sue; Moyer, Kirk Harold; Ketz, Richard John, Jr.; Dougherty, Eugene Patrick; Lesko, Patricia Marie
PATENT ASSIGNEE(S): Rohm and Haas Company, USA
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1153936	A2	20011114	EP 2001-303922	200104

				30
				<--
EP 1153936	A3	20030402		
EP 1153936	B1	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TW 536545	B	20030611	TW 2001-90110617	
				200105 03
				<--
US 2001056150	A1	20011227	US 2001-848833	
				200105 04
				<--
SG 96213	A1	20030523	SG 2001-2634	
				200105 04
				<--
CN 1323839	A	20011128	CN 2001-117903	
				200105 11
				<--
BR 2001001956	A	20011218	BR 2001-1956	
				200105 11
				<--
JP 2001323006	A	20011120	JP 2001-142815	
				200105 14
				<--
PRIORITY APPLN. INFO.:			US 2000-203497P P	
				200005 12
				<--

AB The particles are prepared in aqueous dispersion using emulsion polymerization in the presence of a free radical redox initiator system containing an oxidizing agent, a reducing agent, and 0.01-5 ppm (based on monomers) iron and copper metal ion species. The particles are useful as processing aids and impact modifiers for PVC resins or/and thermoplastic PVC-based polymer blends.

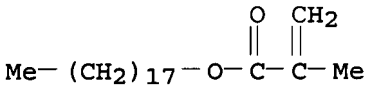
IT **373594-40-2P**, Butyl acrylate-butyl methacrylate-methyl methacrylate-stearyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(prepns. of acrylic polymer particles having ultrahigh mol. weight useful for plastics **additives**)

RN 373594-40-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

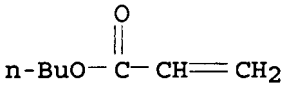
CM 1

CRN 32360-05-7
CMF C22 H42 O2



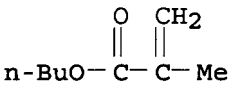
CM 2

CRN 141-32-2
CMF C7 H12 O2



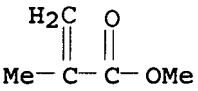
CM 3

CRN 97-88-1
CMF C8 H14 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08F004-40
CC 37-2 (Plastics Manufacture and Processing)
IT 9003-49-0P, Butyl acrylate homopolymer 9010-88-2P, Ethyl acrylate-methyl methacrylate copolymer 25135-39-1P, Acrylic acid-ethyl acrylate-methyl methacrylate copolymer 25322-99-0P, Butyl acrylate-butyl methacrylate-methyl methacrylate copolymer 25852-37-3P, Butyl acrylate-methyl methacrylate copolymer 25852-38-4P, Acrylonitrile-butyl acrylate-methyl methacrylate-styrene copolymer 27136-15-8P, Butyl acrylate-methyl methacrylate-styrene copolymer 27322-15-2P, Acrylic acid-butyl acrylate-ethyl acrylate copolymer 373594-38-8P, Butyl acrylate-sodium vinyl sulfate-vinyl acetate copolymer 373594-39-9P, Sodium vinyl sulfate-vinyl acetate copolymer **373594-40-2P**, Butyl acrylate-butyl methacrylate-methyl methacrylate-stearyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(prepns. of acrylic polymer particles having ultrahigh mol. weight

useful for plastics **additives**)

L26 ANSWER 13 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:897907 HCAPLUS
DOCUMENT NUMBER: 134:58948
TITLE: Hydroxyl group-containing copolymers as lubricity additives for low-sulfur fuel oil and refined middle distillates
INVENTOR(S): Krull, Matthias; Nagel, Waltraud
PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19927560	A1	20001221	DE 1999-19927560	19990617
			<--	
DE 19927560	C2	20020314		
WO 2000078824	A1	20001228	WO 2000-EP5355	20000609
			<--	
W: AU, BR, CA, JP, KR, NO, SG				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6364918	B1	20020402	US 2000-594950	20000609
			<--	
EP 1194456	A1	20020410	EP 2000-945735	20000609
			<--	
EP 1194456	B1	20030903		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003502490	T	20030121	JP 2001-505581	20000609
			<--	
PRIORITY APPLN. INFO.:			DE 1999-19927560 A	19990617
			<--	
			WO 2000-EP5355 W	20000609
			<--	

AB Oil-soluble copolymers with a Hydroxyl Number 10-350 and a mol. weight 500-100,000, are obtained by preparation of a copolymer with: (1) 5-95 mol% units of an olefinic unsatd. carboxylic acid or a carboxylic acid derivative, (2) 5-95 mol% units of a C>5-olefinically unsatd. compound, and (3) 0-40 mol% units of addnl. monomers selected from

C1-6-alkyl (meth)acrylates, C1-6-alkyl vinyl esters, and C2-6-olefins, followed by reaction with a compound that contained >1 OH group and an addnl. functional group that reacts with the carboxylic acid (or acid derivative) of component (1). The finished polymer has a residual acid content during the addition is <150 mg KOH/g copolymer (preferably <10 mg KOH/g). The additives provide lubricity for highly refined fuel oils and middle distillate fuels with a sulfur content <0.5 weight%.

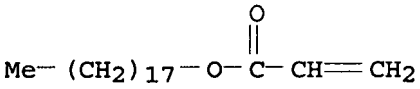
IT **36120-03-3DP**, Acrylic acid-stearyl acrylate copolymer, esters with diethylene glycol
RL: MOA (Modifier or additive use); RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent); USES (Uses)
(**additives**; hydroxyl group-containing copolymers as lubricity **additives** for low-sulfur fuel oil and refined middle distillates)

RN 36120-03-3 HCAPLUS

CN 2-Propenoic acid, polymer with octadecyl 2-propenoate (CA INDEX NAME)

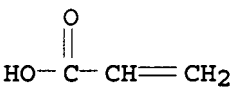
CM 1

CRN 4813-57-4
CMF C21 H40 O2



CM 2

CRN 79-10-7
CMF C3 H4 O2



IC ICM C10L001-18
ICS C08F020-20

CC 51-9 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 38

IT 56-81-5DP, Glycerin, reaction products with carboxylic acid group-containing polymers 79-10-7DP, Acrylic acid, C1-6-alkyl esters, polymers 79-41-4DP, Methacrylic acid, C1-6-alkyl esters, polymers 102-71-6DP, Triethanolamine, diesters with maleic anhydride-1-octadecene copolymer 107-21-1DP, Ethylene glycol, monoesters with maleic anhydride-1-octadecene copolymer 111-42-2DP, Diethanolamine, reaction products with carboxylic acid group-containing polymers 111-46-6DP, Diethylene glycol, reaction products with carboxylic acid group-containing polymers 141-43-5DP, 2-Hydroxyethylamine, reaction products with maleic anhydride-1-octadecene copolymer 25266-02-8DP, Maleic anhydride-1-octadecene copolymer, esters with diethylene glycol 25266-02-8DP, Maleic anhydride-1-octadecene copolymer, reaction

products with hydroxyl group-containing compds. **36120-03-3DP**, Acrylic acid-stearyl acrylate copolymer, esters with diethylene glycol **134590-50-4DP**, 2-Propenoic acid, octadecyl ester, polymer with 2,5-furandione, reaction products with diethanolamine 195990-96-6DP, 2,5-Furandione, polymer with 2-methyl-1-propene and 1-octadecene, esters with diethylene glycol 313355-17-8DP, esters with diethylene glycol **313355-18-9DP**, esters with glycerin
RL: MOA (Modifier or additive use); RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent); USES (Uses)
(**additives**; hydroxyl group-containing copolymers as lubricity **additives** for low-sulfur fuel oil and refined middle distillates)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 14 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:880636 HCAPLUS
DOCUMENT NUMBER: 134:44365
TITLE: Copolymers with free hydroxyl groups, prepared from hydroxyl-group containing monomers, as lubricity additives for low-sulfur middle distillate fuel oils
INVENTOR(S): Krull, Matthias; Kupetz, Markus
PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany
SOURCE: Ger., 12 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19927561	C1	20001214	DE 1999-19927561 <--	19990617
WO 2000078897	A1	20001228	WO 2000-EP5354 <--	20000609
W: AU, BR, CA, JP, KR, NO, SG RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1200539	A1	20020502	EP 2000-943791 <--	20000609
EP 1200539	B1	20041027		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
US 6391071	B1	20020521	US 2000-591236 <--	20000609
JP 2003503541	T	20030128	JP 2001-505646	200006

09
<--
PRIORITY APPLN. INFO.: DE 1999-19927561 A
199906
17
<--
WO 2000-EP5354 W
200006
09
<--

AB Copolymers for use as lubricity additives for low-sulfur (<200 ppm S) middle distillate fuel oils consist of: (1) 5-80 mol% structural units derived from ethylenically unsatd. bonds that have at least one free hydroxyl group, (2) 5-95 mol% structural units derived from ethylenically unsatd. C>5-compds., and (3) 0-40 mol% addnl. units selected form acrylic acid, acrylate esters, vinyl esters, vinyl ethers, and alkenes, with the provision that structural units from the three component classes are different. Component (1) include such monomers as vinyl esters, acrylic esters, mono- and diesters of unsatd. carboxylic acids, methacrylic esters, alkyl vinyl ethers, and alkenes containing hydroxyalkyl, hydroxyalkenyl, hydroxycycloalkyl, or hydroxyaryl groups. Component (2) include such monomers as vinyl esters of C>6-carboxylic acids, (meth)acrylic esters with C>5-alcs., C>5-alkyl vinyl ethers, and C>5-olefins and vinylaroms. Component (3) include such monomers as alkylamino acrylates or methacrylates, N-alkyl acrylamides and methacrylamides, vinyl amides, aminoalkyl vinyl ethers, allyl amine, and vinyl heterocyclics. The polymers have an average mol. weight, Mw, of 500-100,000, a melt viscosity at 140° of 10-2000 mPa-s, an OH-Number of 10-300 mg KOH/g, and are present at 0.001-2 weight% concentration in the middle distillates.

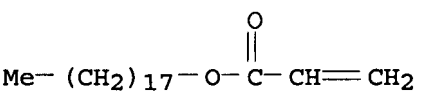
IT **79830-18-5P**, 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with octadecyl 2-propenoate
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(**additives**; copolymers with free hydroxyl groups, prepared from hydroxyl-group containing monomers, as lubricity **additives** for low-sulfur middle distillate fuel oils)

RN 79830-18-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with octadecyl 2-propenoate (9CI) (CA INDEX NAME)

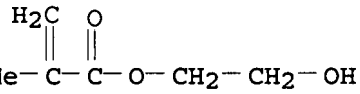
CM 1

CRN 4813-57-4
CMF C21 H40 O2



CM 2

CRN 868-77-9
CMF C6 H10 O3



IC ICM C10L001-10
ICS C10M143-00; C10M145-00
CC 51-9 (Fossil Fuels, Derivatives, and Related Products)
IT 79-10-7DP, Acrylic acid, esters, polymers 79-41-4DP, Methacrylic acid, esters, polymers 107-11-9DP, Allyl amine, polymers with hydroxyl group-containing ethylenically unsatd. monomers 25584-83-2DP, Hydroxypropyl acrylate, polymers with tallow alc. acrylates 44565-77-7DP, 2-Propenamide, N-ethenyl-, polymers with hydroxyl group-containing ethylenically unsatd. monomers **79830-18-5P**, 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with octadecyl 2-propenoate 188897-70-3DP, 2-Propenamide, N-ethenyl-2-methyl-, polymers with hydroxyl group-containing ethylenically unsatd. monomers 312963-59-0P 312963-60-3P 312963-61-4P 312963-62-5P **312963-63-6P** 312963-64-7P **312963-65-8P** 312963-66-9P **313066-32-9P**
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(**additives**; copolymers with free hydroxyl groups, prepared from hydroxyl-group containing monomers, as lubricity **additives** for low-sulfur middle distillate fuel oils)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 15 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:452504 HCAPLUS
DOCUMENT NUMBER: 133:75045
TITLE: Peroxy bond-containing powdery polymers, (meth)acrylic polymer moldings, and artificial marble with excellent crack and shrinkage resistance, transparency, and gloss
INVENTOR(S): Hattori, Shinji; Takamura, Masumi; Ujigawa, Norihisa; Hikita, Shinya
PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000186115	A	20000704	JP 1999-289828	19991012
			<--	
PRIORITY APPLN. INFO.:			JP 1998-295329 A	19981016
			<--	

AB The polymers, useful as low-profile additives for the moldings, show average particle size 0.1-90 μm and are manufactured from vinyl monomers

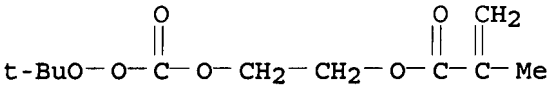
and peroxy bond-containing monomers. Thus, 90 parts syrup comprising Me methacrylate 70, NK Ester NPG 30, and Dianal BR 52 [poly(Me methacrylate)] 100 parts was mixed with Me methacrylate-tert-butylperoxy methacryloyloxyethyl carbonate-NK Ester 1G (ethylene glycol dimethacrylate) copolymer (average diameter 51 μm, total active O 0.06%) 10, tert-butylperoxybenzoate 1, AL(OH)3 100, and Zn stearate 4 parts and hot-pressed to give an artificial marble showing no crack, light transmittance 12%, 60° gloss 88%, and volume shrinkage 3.8% under 5 MPa.

IT **279216-15-8P**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(peroxy bond-containing powdery polymers as low-profile **additives** for artificial marble with excellent crack and shrinkage resistance, transparency, and gloss)

RN 279216-15-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[(1,1-dimethylethyl)dioxy]carbonyl]oxy]ethyl ester, polymer with methyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

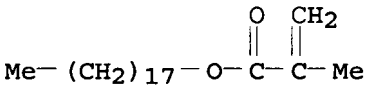
CM 1

CRN 41892-41-5
CMF C11 H18 O6



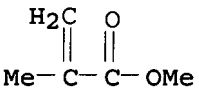
CM 2

CRN 32360-05-7
CMF C22 H42 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08F020-02
ICS C04B026-06; C08F002-44; C08F004-36; C08J005-00; C08L033-06; C04B111-54
CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 35
IT 169509-00-6P, Butyl acrylate-tert-butylperoxy methacryloyloxyethyl carbonate-methyl methacrylate copolymer 204527-34-4P 204527-36-6P 279216-13-6P 279216-14-7P **279216-15-8P** 279216-16-9P
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(peroxy bond-containing powdery polymers as low-profile **additives** for artificial marble with excellent crack and shrinkage resistance, transparency, and gloss)

L26 ANSWER 16 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:356837 HCAPLUS
DOCUMENT NUMBER: 132:348781
TITLE: Modification of masonry compositions
INVENTOR(S): Bowe, Michael Damian
PATENT ASSIGNEE(S): Rohm and Haas Co., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000143925	A	20000526	JP 1999-313704 <--	19991104
EP 1004554	A2	20000531	EP 1999-308344 <--	19991022
EP 1004554	A3	20020522		
EP 1004554	B1	20051228		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2287295	A1	20000504	CA 1999-2287295 <--	19991025
CA 2287295	C	20030513		
AU 9956070	A1	20000511	AU 1999-56070 <--	19991025
AU 770702	B2	20040226		
US 6235814	B1	20010522	US 1999-428779 <--	19991028
CN 1253923	A	20000524	CN 1999-123404 <--	19991103
CN 1113827	B	20030709		
BR 9904994	A	20000912	BR 1999-4994	

199911
03
<--
PRIORITY APPLN. INFO.: US 1998-106948P P
199811
04
<--

AB The process involves treating masonry compns. with polymers composed of (a) 20-100 parts (meth)acrylic acid C12-40 alkyl esters, (b) 0-80 parts ≥ 1 ethylenically unsatd. monomers which may contain 0-40 parts hydroxyethyl (meth)acrylates or hydroxypropyl (meth)acrylates, and (c) 0-80 parts ethylenically unsatd. acid group-containing monomers or their salts. The polymers are mixed with masonries or slurries for masonry coatings. The masonries may be concretes, concrete roof tiles. Thus, 10 parts 40:10:49:1 stearyl methacrylate-Bu acrylate-Me methacrylate-methacrylic acid copolymer was mixed with mortar composition and cured to give a sample with excellent bending strength.

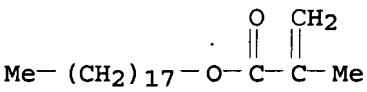
IT **269733-82-6P**
RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**additives** or coatings; masonry compns. modified with acrylic polymers)

RN 269733-82-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

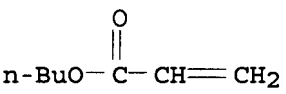
CM 1

CRN 32360-05-7
CMF C22 H42 O2



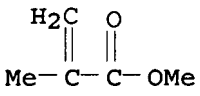
CM 2

CRN 141-32-2
CMF C7 H12 O2



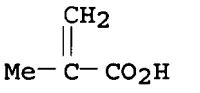
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC ICM C08L033-06
ICS C08K003-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42, 58
IT **269733-82-6P**
RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)** ; USES (Uses)
(**additives** or coatings; masonry compns. modified with acrylic polymers)

L26 ANSWER 17 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:277723 HCAPLUS
DOCUMENT NUMBER: 132:295410
TITLE: Polymer compositions and a method of promoting soil release from fabrics using said polymer compositions
INVENTOR(S): Shulman, Jan Edward; Kirk, Thomas Cleveland; Swift, Graham; Schwartz, Curtis; Creamer, Marianne Patricia; Falcone, Beth Anne
PATENT ASSIGNEE(S): Rohm and Haas Company, USA
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 995791	A1	20000426	EP 1999-308001	19991011
			<--	
EP 995791	B1	20040218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AU 9953555	A1	20000504	AU 1999-53555	19991008
			<--	

ZA 9906411	A	20000412	ZA 1999-6411	199910 11
			<--	
CA 2285863	A1	20000422	CA 1999-2285863	199910 13
			<--	
KR 2000029231	A	20000525	KR 1999-45809	199910 21
			<--	
MX 9909687	A	20000531	MX 1999-9687	199910 21
			<--	
BR 9905106	A	20000815	BR 1999-5106	199910 21
			<--	
CN 1252409	A	20000510	CN 1999-123313	199910 22
			<--	
JP 2000143738	A	20000526	JP 1999-301272	199910 22
			<--	
US 2001036912	A1	20011101	US 2001-878445	200106 11
			<--	
US 6451756	B2	20020917		
PRIORITY APPLN. INFO.:			US 1998-105176P P	199810 22
			<--	
			US 1999-400630 A3	199909 20
			<--	

AB Hydrophobically modified polycarboxylate polymers of SAmBnCpT [A = residue of monounsatd. carboxylic acid; B = residue of (alkoxylated) acrylate; C = residue of copolymerizable monomer; S and T are end groups; m = 0-500; n >0; p = 0-500; m + p >0] are useful for promoting soil release from fabrics, particularly cotton and cotton-containing fabrics. An additive was prepared from acrylic acid and tetraethylene glycol lauryl ether methacrylate.

IT **28062-60-4P**, Acrylic acid-lauryl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(soil release **additive**; polymer compns. and a method of promoting soil release from fabrics)

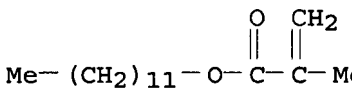
RN 28062-60-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-propenoic acid (CA INDEX NAME)

CM 1

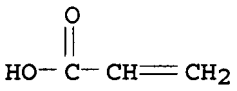
CRN 142-90-5

CMF C16 H30 O2



CM 2

CRN 79-10-7
CMF C3 H4 O2



IC ICM C11D003-37
ICS C11D003-00
CC 46-5 (Surface Active Agents and Detergents)
Section cross-reference(s): 40
IT **28062-60-4P**, Acrylic acid-lauryl methacrylate copolymer
97105-16-3P 264874-54-6P 264874-55-7P
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(soil release **additive**; polymer compns. and a method of promoting soil release from fabrics)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 18 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:583374 HCAPLUS
DOCUMENT NUMBER: 131:215405
TITLE: Acrylic copolymers as additives, hot melt adhesives containing the additives, and substances bonded with the adhesives
INVENTOR(S): Shimada, Tetsuya; Horiie, Takafumi
PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11246837	A	19990914	JP 1998-64103	19980227
JP 3038549	B2	20000508	<--	

PRIORITY APPLN. INFO.: JP 1998-64103 19980227

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AB Hot melt adhesives, especially useful for bonding polyolefin articles, contain the additives comprising copolymers (Tg ≤20°) containing styrene monomers and C4-24 alkyl (meth)acrylates and/or (meth)acrylonitrile, rubbery polymers selected from diene (co)polymers and ethylene-α-olefin copolymers, tackifiers, and optionally plasticizers. Thus, 420:180 styrene-Bu acrylate copolymer (Tg 2°) 25, SBS rubber (Kraton D 1155) 20, partially hydrogenated petroleum resin (Arkon M 115) 40, oil (Diana Process Oil PW 90) 15 parts, antioxidants, and UV absorber showed good oil retention and adhesive strength when used for bonding 2 nonwoven polypropylene fabrics together or a nonwoven polypropylene fabric with a polyethylene film.

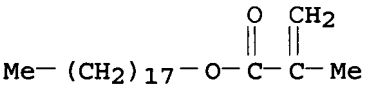
IT **32761-10-7P**, Stearyl methacrylate-styrene copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(hot melt adhesives containing styrene-(meth)acrylic copolymer **additives**, rubbers, and tackifiers for bonding polyolefins)

RN 32761-10-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with ethenylbenzene (CA INDEX NAME)

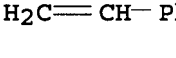
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

CRN 100-42-5
CMF C8 H8



IC ICM C09J125-12
ICS B32B027-32; C09J121-00; C09J125-04; C09J125-14; C09J145-02; C09J153-00; C09J157-02

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 39, 40

IT 25767-47-9P, Butyl acrylate-styrene copolymer **32761-10-7P**, Stearyl methacrylate-styrene copolymer **117521-61-6P**, Myristyl methacrylate-styrene copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(hot melt adhesives containing styrene-(meth)acrylic copolymer **additives**, rubbers, and tackifiers for bonding polyolefins)

L26 ANSWER 19 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:311270 HCAPLUS
DOCUMENT NUMBER: 130:339501
TITLE: Printing ink compositions containing core-shell binders and additives for image film having superior smear-fastness
INVENTOR(S): Nguyen, Khe C.; Ganapathiappan, Sivapackia
PATENT ASSIGNEE(S): Hewlett-Packard Company, USA
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9923183	A1	19990514	WO 1998-US23474	19981029
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 5990202	A	19991123	US 1997-998164	19971224
US 6417249	B1	20020709	US 1998-138772	19980824
AU 9913796	A	19990524	AU 1999-13796	19981029
EP 1027393	A1	20000816	EP 1998-957567	19981029
EP 1027393	B1	20040421		
R: DE, FR, GB, IT				
JP 2001521977	T	20011113	JP 2000-519048	19981029

PRIORITY APPLN. INFO.: US 1997-962496 A 19971031
US 1997-998164 A 19971224

US 1998-138772 A 199808 24
<--
WO 1998-US23474 W 199810 29
<--

OTHER SOURCE(S): MARPAT 130:339501

AB Core/shell binders such as [AmBnC'p]x are prepared, where A and B are hydrophobic components in which A exhibits a glass transition temperature Tg -150° to 25° and B exhibits a Tg >25°, C' forms a hydrophilic or water-soluble component and has an ionic or nonionic structure, m <30%, n >40%, and p <30%, m + n + p = 100%, and x = 1-100,000, and the weight-average mol. weight .apprx.1000-2,000,000. The binder polymer is used in conjunction with additives comprising either (a) amine alcs. R1R2N(RX)OH (R1, R2 = H, alkyl, alkoxy, aryl, and phenoxy, R = alkyl, X = H, alkyl, aryl, OH, CO2H, CHO, and substituted groups) or (b) organic acids (water-soluble or water-dispersive), including polymeric acids, optionally amines, polyalcs., polyamines, and polyesters, and the binder/colorant ratio ≥10. Thus, hexyl acrylate-Me methacrylate-polyethylene glycol Me ether acrylate copolymer emulsion, Et acetate (0.05%), and water was cast on glass and dried as a test film having Tg -10°.

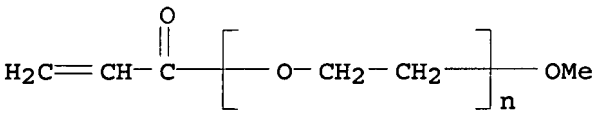
IT **224045-21-0P**, Octadecyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer
RL: **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(core shell; printing ink compns. containing core-shell binders and **additives** for image film having superior smear-fastness and water fastness)

RN 224045-21-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with octadecyl 2-propenoate and α-(1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

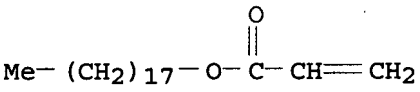
CM 1

CRN 32171-39-4
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



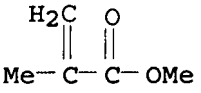
CM 2

CRN 4813-57-4
CMF C21 H40 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM C09D011-00
CC 42-12 (Coatings, Inks, and Related Products)
IT 224045-19-6P, Hexyl acrylate-methyl methacrylate-acrylamide graft copolymer 224045-20-9P, Hexyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer **224045-21-0P**, Octadecyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-22-1P, (3-Acryloxypropyl)methyldimethoxysilane-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-23-2P, Hexyl acrylate-maleimide-polyethylene glycol methyl ether acrylate graft copolymer 224045-24-3P, Ethyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-25-4P, Propyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-26-5P, Butyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-29-8P, 2-Hydroxyethyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-31-2P, Phenethyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-34-5P, 6-Phenylhexyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-36-7P, Cyclohexyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-37-8P, N,N-Dihexylacrylamide-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-38-9P, N,N-Dimethylaminoethyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-39-0P, Vinyl acetate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-40-3P, Vinyl butyl ether-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-41-4P, Hexyl acrylate-styrene-polyethylene glycol methyl ether acrylate graft copolymer 224045-42-5P, Hexyl acrylate-dimethylstyrene-polyethylene glycol methyl ether acrylate graft copolymer 224045-43-6P, Hexyl acrylate-glycidyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-44-7P, Hexyl acrylate-glycidyl acrylate-polyethylene glycol methyl ether acrylate graft copolymer 224045-45-8P, Hexyl acrylate-N-hexylmaleimide-polyethylene glycol methyl ether acrylate graft copolymer 224045-46-9P, Hexyl acrylate-N-vinylmaleimide-polyethylene glycol methyl ether acrylate graft copolymer 224045-48-1P, Hexyl acrylate-methyl methacrylate-N-vinyl-4-methylpyrrolidone graft

copolymer 224045-50-5P, Hexyl acrylate-methyl methacrylate-acrylic acid graft copolymer 224045-51-6P, Hexyl acrylate-methyl methacrylate-methacrylic acid graft copolymer 224045-52-7P, Hexyl acrylate-methyl methacrylate-maleic acid graft copolymer 224045-53-8P, Hexyl acrylate-methyl methacrylate-vinylbenzoic acid graft copolymer 224045-54-9P, Hexyl acrylate-methyl methacrylate-vinylsulfonamide graft copolymer 224045-55-0P, Hexyl acrylate-methyl methacrylate-sodium acrylate graft copolymer 224045-56-1P, Ethyl acrylate-methyl methacrylate-(acrylamidopropyl)triethylammonium chloride graft copolymer 224045-57-2P, Hexyl acrylate-methyl methacrylate-ammonium acrylate graft copolymer 224045-58-3P, Hexyl acrylate-methyl methacrylate-ammonium methacrylate graft copolymer 224045-60-7P, Hexyl acrylate-methyl methacrylate-sodium styrenesulfonate graft copolymer 224045-61-8P, Methyl methacrylate-hexyl acrylate-polyethylene glycol methyl ether acrylate-acrylic acid graft copolymer **224047-92-1P**, Hydroxyoctadecyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224047-99-8P, Propyl acrylate-methyl methacrylate-vinylpyridine hydrochloride graft copolymer 224048-41-3P, Hexyl acrylate-tetrafluoropropyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer **224184-44-5P**, Lauryl methacrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer **224184-45-6P**, Octadecyl methacrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer **224184-46-7P**, Hydroxylauryl methacrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224184-47-8P, 2-Aminopropyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224184-48-9P, 6-Aminohexyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224184-50-3P, 12-Aminolauryl methacrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate graft copolymer 224184-51-4P, Hexyl acrylate-trifluoromethylstyrene-polyethylene glycol methyl ether acrylate graft copolymer 224184-52-5P, Hexyl acrylate-methyl methacrylate-1-vinyl-2-pyrrolidone graft copolymer 224184-53-6P, Hexyl acrylate-methyl methacrylate-vinylimidazole graft copolymer 224184-54-7P, Hexyl acrylate-methyl methacrylate-2-methylacrylamide graft copolymer 224184-61-6P, Butyl acrylate-methyl methacrylate-sodium vinyl phosphate graft copolymer
RL: **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(core shell; printing ink compns. containing core-shell binders and **additives** for image film having superior smear-fastness and water fastness)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 20 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:774993 HCAPLUS
DOCUMENT NUMBER: 130:68828
TITLE: **Dewaxing** of oils with solvents in the presence of **dewaxing additives**
AUTHOR(S): Tanasescu, Constantin; Ciuparu, Dragos; Florea, Mircea
CORPORATE SOURCE: Fac. Tehnol. Petrol. Petrochim., Univ. "Petrol-Gaze" Ploiesti, Ploiesti, Rom.

SOURCE: Revista de Chimie (Bucharest) (1998), 49(9), 593-597
CODEN: RCBUAU; ISSN: 0034-7752
PUBLISHER: CHIMINFORM DATA S.A.
DOCUMENT TYPE: Journal
LANGUAGE: Romanian

AB The paper presents an exptl. study on the influence some polyalkyl methacrylate or polyalkyl acrylate type paraffin removing **additives** have upon the paraffin removal from oils with solvents. Six polymers or copolymers, differing in the average mol. masses, mol. masses dispersion, polymer lateral sites lengths, styrene proportion, dilution degree, were used as paraffin removing **additives.** The exptl. results rendered evident the influence of the **additive** characteristics and concentration upon the filtration rate and the paraffin-removed oil yield. This type of paraffin removing **additives** have a high efficiency if the mol. mass dispersion degree is higher than 6 and if the average no.of carbon atoms in the lateral site is higher than 16.

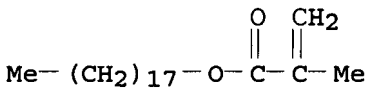
IT **29316-77-6**
RL: MOA (Modifier or additive use); USES (Uses)
(**dewaxing** of oils with solvents in the presence of **dewaxing additives**)

RN 29316-77-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with octadecyl 2-methyl-2-propenoate (CA INDEX NAME)

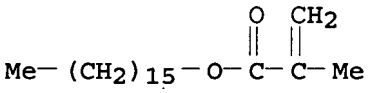
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

CRN 2495-27-4
CMF C20 H38 O2



CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

ST petroleum fraction **dewaxing** polyalkyl methacrylate acrylate

IT Polymers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**dewaxing** of oils with solvents in the presence of **dewaxing additives**)

IT Paraffin waxes, processes
RL: REM (Removal or disposal); PROC (Process)
(**dewaxing** of oils with solvents in the presence of **dewaxing additives**)

IT Petroleum refining
(**dewaxing**; **dewaxing** of oils with solvents in the presence of **dewaxing additives**)
IT Petroleum products
(fractions; **dewaxing** of oils with solvents in the presence of **dewaxing additives**)
IT **29316-77-6 217651-00-8 217651-01-9 217651-02-0**
RL: MOA (Modifier or additive use); USES (Uses)
(**dewaxing** of oils with solvents in the presence of **dewaxing additives**)

L26 ANSWER 21 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:674985 HCAPLUS
DOCUMENT NUMBER: 129:345276
TITLE: Fuel oil additives
INVENTOR(S): Ota, Takahisa; Hironaga, Hideo
PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10279964	A	19981020	JP 1997-102697	19970404

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PRIORITY APPLN. INFO.: JP 1997-102697 19970404

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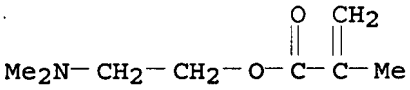
AB Fuel oil additives with improved solubility and detergent properties of intake system and combustion chamber of gasoline engines contain polymers having monomers as required structural units selected from N-dialkylaminoalkyl(meth)acrylates, morpholinoalkyl(meth)acrylates, N-(anilinoaryl)(meth)acrylamides, vinyllactams, vinylimidazoles, and vinylpyridines.
IT **26246-82-2P**, N,N-Dimethylaminoethyl methacrylate-lauryl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(detergent; fuel oil **additives** for gasoline engines)
RN 26246-82-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate (CA INDEX NAME)

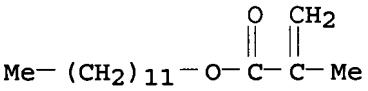
CM 1

CRN 2867-47-2
CMF C8 H15 N O2



CM 2

CRN 142-90-5
CMF C16 H30 O2



IC ICM C10L001-22
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
IT 26222-42-4P, N,N-Dimethylaminoethyl methacrylate-methyl methacrylate copolymer **26246-82-2P**, N,N-Dimethylaminoethyl methacrylate-lauryl methacrylate copolymer 26658-83-3P, Butyl methacrylate-N,N-Dimethylaminoethyl methacrylate copolymer **28389-80-2P**, Lauryl methacrylate-N-vinylpyrrolidone copolymer 55972-47-9P, Poly(2-morpholinoethyl methacrylate) **215444-75-0P 215444-76-1P 215444-77-2P**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(detergent; fuel oil **additives** for gasoline engines)

L26 ANSWER 22 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:674984 HCAPLUS
DOCUMENT NUMBER: 129:345275
TITLE: Fuel oil additives
INVENTOR(S): Ohta, Yoshihisa; Hironaga, Hideo
PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10279963	A	19981020	JP 1997-102698	19970404

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PRIORITY APPLN. INFO.: JP 1997-102698 19970404

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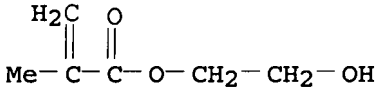
AB Fuel oil additives with improved solubility and detergent properties of intake system and combustion chamber of gasoline engine contain polymers having OH-containing (meth)acrylate monomers as required units.
IT **34888-27-2P**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or

additive use); **PREP (Preparation)**; USES (Uses)
(detergent; fuel oil **additives** for gasoline engines)

RN 34888-27-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (CA INDEX NAME)

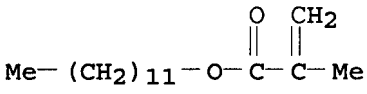
CM 1

CRN 868-77-9
CMF C6 H10 O3



CM 2

CRN 142-90-5
CMF C16 H30 O2



IC ICM C10L001-18
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
IT **34888-27-2P** 39420-45-6P, Polypropylene glycol monomethacrylate 57047-33-3P **138123-52-1P** 155676-19-0P
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(detergent; fuel oil **additives** for gasoline engines)

L26 ANSWER 23 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:344560 HCAPLUS
DOCUMENT NUMBER: 129:43141
TITLE: Polyacrylates transesterified with long-chain alcohols as wax deposition inhibitors in petroleum recovery equipment and pipelines
INVENTOR(S): Duncum, Simon Neil; Hodgson, Philip Kenneth Gordon; James, Keith; Osborne, Christopher George
PATENT ASSIGNEE(S): BP Exploration Operating Co., Ltd., UK
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9821446	A1	19980522	WO 1997-GB3076	19971107

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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9748778	A	19980603	AU 1997-48778	199711 07

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GB 2334258	A	19990818	GB 1999-11074	199711 07

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GB 2334258	B	20010516		
NO 9902310	A	19990702	NO 1999-2310	199905 12

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US 2001056164	A1	20011227	US 2001-853600	200105 14

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PRIORITY APPLN. INFO.:	GB 1996-23736	A 199611 14

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	GB 1996-23742	A 199611 14

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	GB 1996-26443	A 199612 20

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	GB 1997-9064	A 199705 02

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	GB 1997-13709	A 199706 27

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	WO 1997-GB3076	W 199711 07

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	US 1999-311161	A1 199905 13

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AB Wax deposition inhibitors for crude petroleums, especially in production equipment and pipelines, are polymers of (1) a monomer with structural units derived from at least one ester of an aliphatic carboxylic acid with an aliphatic alc., in which one of the acid and alc. is ethylenically unsatd. and the other of the acid and alc. has

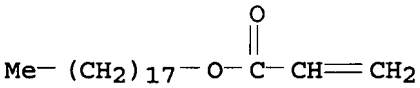
a long chain group (of 14-40 carbons), and (2) a monomer with structural units derived from a corresponding ester with structural units derived from an aliphatic carboxylic acid and an aliphatic alc., in which one of the acid and alc. is ethylenically unsatd. and the other has an aliphatic group of 1-13 carbons, such that at least 30%, preferably 50-90%, of these aliphatic groups have 15-35 carbons. The polymers are preferably made by transesterification [e.g., of a poly(alkyl acrylate) with a long-chain alc.]. Blends of such polymers and/or the corresponding homopolymers or copolymers of the esters and/or polyalkyleneimines with long side chains (e.g., prepared by copolymn. with long-chain alkyl-substituted oxiranes), and optionally with monomeric polar additives, may also be used as inhibitors.

IT **25986-77-0P**, Poly(octadecyl acrylate)
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(**additives** containing; polyacrylates transesterified with long-chain alcs. as wax deposition inhibitors in petroleum recovery equipment and pipelines)

RN 25986-77-0 HCAPLUS
CN 2-Propenoic acid, octadecyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 4813-57-4
CMF C21 H40 O2



IC ICM E21B037-06
ICS C10L001-18; C10L001-14
CC 51-2 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 38
IT 9003-95-6P, Poly(vinyl stearate) **25986-77-0P**, Poly(octadecyl acrylate) **36632-30-1P**, Methyl acrylate-octadecyl acrylate copolymer 208251-54-1P
RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(**additives** containing; polyacrylates transesterified with long-chain alcs. as wax deposition inhibitors in petroleum recovery equipment and pipelines)
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 24 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:506255 HCAPLUS
DOCUMENT NUMBER: 127:191950
TITLE: The disproportionate concentration of reactive additives at the surface of UV-cured coatings
AUTHOR(S): Bongiovanni, R.; Malucelli, G.; Priola, A.
CORPORATE SOURCE: Dep. Materials Sci. & Chemical Engineering, Politecnico Torino, Turin, 10129, Italy
SOURCE: Surface Coatings International (**1997**), 80(6), 268-273
CODEN: SCOIE6; ISSN: 1356-0751

PUBLISHER: Oil and Colour Chemists' Association
DOCUMENT TYPE: Journal
LANGUAGE: English

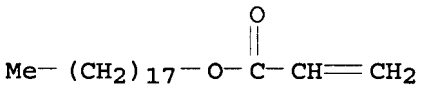
AB Different types of reactive additives has been incorporated in UV-curable systems in order to modify their surface properties. They include long chain hydrogenated acrylic monomers, some fluorinated acrylates and two perfluoropolyether dimethacrylates. Contact angle and surface tension were measured: the results showed that a selective modification of the film surfaces was achieved, depending on the monomer structure, on the reactive additive, on its concentration and the curing conditions. XPS measurements and RBS (Rutherford back-scattering) expts. have given information on the surface composition and on the distribution throughout the film proved disproportionate concentration of the reactive additives.

IT **25986-77-0**, Octadecyl acrylate homopolymer
RL: PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**
(disproportionate concentration of acrylic reactive **additives** at surface of UV-cured acrylic coatings)

RN 25986-77-0 HCAPLUS
CN 2-Propenoic acid, octadecyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 4813-57-4
CMF C21 H40 O2



CC 42-7 (Coatings, Inks, and Related Products)

IT **25986-77-0**, Octadecyl acrylate homopolymer 30282-36-1 193898-55-4
RL: PRP (Properties)
(disproportionate concentration of acrylic reactive **additives** at surface of UV-cured acrylic coatings)

IT **193898-43-0P**, Ebecryl 150-octadecyl acrylate copolymer 193898-44-1P 193898-45-2P 193898-46-3P 193898-48-5P **193898-49-6P**, Dodecyl acrylate-Ebecryl 150 copolymer 193898-50-9P 193898-51-0P 193898-52-1P 193898-57-6P **194484-48-5P**, Bisphenol A diglycidyl ether diacrylate-octadecyl aceylate-tripropylene glycol diacrylate copolymer **194484-49-6P**, Bisphenol A diglycidyl ether diacrylate-hexadecyl aceylate-tripropylene glycol diacrylate copolymer **194484-50-9P 194484-51-0P** 194484-52-1P, Bisphenol A diglycidyl ether diacrylate-octacyl aceylate-tripropylene glycol diacrylate copolymer 194484-53-2P, Bisphenol A diglycidyl ether diacrylate-butyl aceylate-tripropylene glycol diacrylate copolymer
RL: PRP (Properties); **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(disproportionate concentration of acrylic reactive **additives** at surface of UV-cured acrylic coatings)

L26 ANSWER 25 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:296658 HCAPLUS

DOCUMENT NUMBER: 126:278289
TITLE: Additive masterbatch for use in resins
INVENTOR(S): Irie, Yoshio; Nagamura, Hiroshi; Iwamura, Juji; Gomi, Tomonori
PATENT ASSIGNEE(S): Nippon Catalytic Chem Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09052956	A	19970225	JP 1995-204525	19950810

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PRIORITY APPLN. INFO.: JP 1995-204525 19950810

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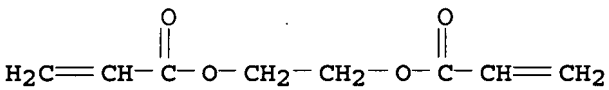
AB The masterbatches contain additives and oil-absorbent resins or resins that absorb the additives. The masterbatches have high additive concentration, low stickiness, and good handling, and are useful in plastics, rubber, or thermosetting resins. A masterbatch contained an oil absorption agent containing hydrophobic silica and divinylbenzene-hexadecyl methacrylate-N-octylmethacrylamide copolymer, chlorinated paraffin, and polystyrene.

IT **137560-18-0P**, Dodecyl acrylate-ethylene glycol diacrylate copolymer
RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(**additive** masterbatch for use in resins)

RN 137560-18-0 HCAPLUS
CN 2-Propenoic acid, 1,2-ethanediyl ester, polymer with dodecyl 2-propenoate (9CI) (CA INDEX NAME)

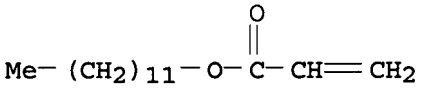
CM 1

CRN 2274-11-5
CMF C8 H10 O4



CM 2

CRN 2156-97-0
CMF C15 H28 O2

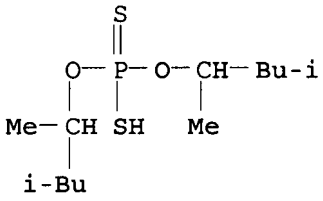


IC ICM C08J003-22
ICS C08L101-00
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 39
IT **137560-18-0P**, Dodecyl acrylate-ethylene glycol diacrylate copolymer **141029-36-9P**, Divinylbenzene-hexadecyl methacrylate-N-octylmethacrylamide copolymer 141029-37-0P, 1,6-Hexanediol diacrylate-2-hydroxyethyl acrylate-nonylphenyl acrylate copolymer **141055-62-1P** 151542-77-7P 151542-78-8P, Trimethylolpropane triacrylate-vinyl laurate copolymer **188847-47-4P** 188847-50-9P 188847-53-2P
RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation); **PREP (Preparation)**; USES (Uses)
(**additive** masterbatch for use in resins)

L26 ANSWER 26 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:222524 HCAPLUS
DOCUMENT NUMBER: 126:278102
TITLE: Phosphosulfurized antiwear, extreme-pressure, and VI [viscosity index] polymer additives: synthesis, characterization and lubricant applications
AUTHOR(S): Keromest, C.; Durand, J.-P.; Born, M.; Gateau, P.; Tessier, M.; Marechal, E.
CORPORATE SOURCE: Institut francais du petrole, Rueil-Malmaison, 92852, Fr.
SOURCE: Revue de l'Institut Francais du Petrole (**1997**), 52(1), 35-44
CODEN: RFPTBH; ISSN: 0020-2274
PUBLISHER: Technip
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Poly(alkyl methacrylates) (PMA) and a maleated ethylene/propylene copolymer (OCP), usable both as lubricant VI improver and antiwear extreme-pressure (AW-EP) additives, were prepared by introducing AW-EP functional moieties on PMA and OCP backbones under the form of dialkyl dithiophosphates; mech. performances of these polymers were pre-assessed by means of a four-ball machine.
IT **188958-58-9P**
RL: **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of antiwear, extreme-pressure, and viscosity index polymer **additives**)
RN 188958-58-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with octadecyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, O,O-bis(1,3-dimethylbutyl) phosphorodithioate (9CI) (CA INDEX NAME)

CM 1

CRN 6028-47-3
CMF C12 H27 O2 P S2

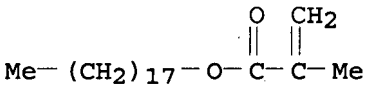


CM 2

CRN 120066-95-7
CMF (C22 H42 O2 . C16 H30 O2 . C7 H10 O3)x
CCI PMS

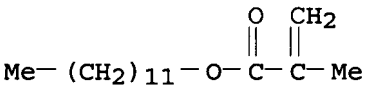
CM 3

CRN 32360-05-7
CMF C22 H42 O2



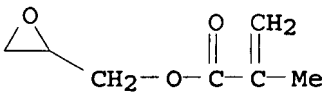
CM 4

CRN 142-90-5
CMF C16 H30 O2



CM 5

CRN 106-91-2
CMF C7 H10 O3



CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 51

IT 108-31-6DP, 2,5-Furandione, reaction products with ethylene-propylene copolymers, diisopropyldithiophosphorylethyl esters, preparation 9010-79-1DP, Ethylene-propylene copolymer, maleated, diisopropyldithiophosphorylethyl esters **188958-58-9P 189020-46-0P**
RL: **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(preparation of antiwear, extreme-pressure, and viscosity index polymer **additives**)

L26 ANSWER 27 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:171864 HCAPLUS
DOCUMENT NUMBER: 126:158626
TITLE: Kneading of rubber components containing large quantities of oily additives
INVENTOR(S): Gomi, Tomonori; Nagamura, Hiroshi; Iwamura, Juji
PATENT ASSIGNEE(S): Nippon Catalytic Chem Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08337656	A	19961224	JP 1995-147158	199506 14

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PRIORITY APPLN. INFO.: JP 1995-147158 199506 14

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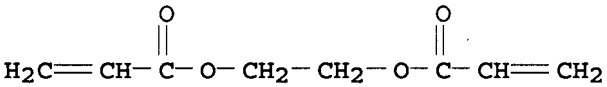
AB Title method is carried out by adding oil-absorbent particles containing water-insol. powder from organic acid metal salts [solubility to 100 g H2O ≤1 g] and/or hydrophobic inorg. compds. [MeOH value ≥25%] to rubber components containing large quantities of oily additives. Thus, a composition containing IR 2200 100, Sunpar 110 (paraffin process oil) 50, C black 5, and oil-absorbent particles (containing 15 parts 0.206:99.794 1,6-hexanediol diacrylate-nonylphenyl acrylate copolymer and 5 parts Ca stearate) 5 parts was kneaded to give a product showing less Sunpar 110 loss, uniform C black dispersibility, and short kneading time.

IT **137560-18-0P**, Dodecyl acrylate-ethylene glycol diacrylate copolymer
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(oil absorbent component; kneading of rubber components containing large quantities of oily **additives**)

RN 137560-18-0 HCAPLUS
CN 2-Propenoic acid, 1,2-ethanediyl ester, polymer with dodecyl 2-propenoate (9CI) (CA INDEX NAME)

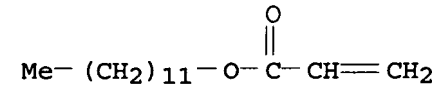
CM 1

CRN 2274-11-5
CMF C8 H10 O4



CM 2

CRN 2156-97-0
CMF C15 H28 O2



IC ICM C08J003-20
ICS C08L021-00
CC 39-9 (Synthetic Elastomers and Natural Rubber)
IT **137560-18-0P**, Dodecyl acrylate-ethylene glycol diacrylate copolymer **141029-36-9P**, Divinylbenzene-hexadecyl methacrylate-N-octylmethacrylamide copolymer 141029-37-0P 141053-20-5P, 1,6-Hexanediol diacrylate-nonylphenyl acrylate copolymer 146268-63-5P, tert-Butylstyrene-1-decene-divinylbenzene copolymer 151542-78-8P, Trimethylolpropane triacrylate-vinyl laurate copolymer **186964-62-5P**
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(oil absorbent component; kneading of rubber components containing large quantities of oily **additives**)

L26 ANSWER 28 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:590443 HCAPLUS
DOCUMENT NUMBER: 125:223467
TITLE: Manufacture of star-branched (meth)acrylate polymers and their use as lubricating oil additives
INVENTOR(S): Mishra, Munmaya Kumar; Shirodkar, Shailaja Madhusudhan; Jung, Alfred Karl
PATENT ASSIGNEE(S): Texaco Development Corporation, USA
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9623012	A1	19960801	WO 1996-US753	19960122 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN				
US 5552491	A	19960903	US 1995-456195	19950531 <--

CA 2186612	A1	19960801	CA 1996-2186612	199601 22 <--
AU 9647031	A	19960814	AU 1996-47031	199601 22 <--
EP 753019	A1	19970115	EP 1996-902737	199601 22 <--
EP 753019	B1	20000412		
R: BE, DE, FR, GB				
JP 09511784	T	19971125	JP 1996-522943	199601 22 <--
JP 3599743	B2	20041208		
HK 1004714	A1	20010112	HK 1998-103012	199804 09 <--
PRIORITY APPLN. INFO.:			US 1995-378977 A	199501 27 <--
			WO 1996-US753 W	199601 22 <--

OTHER SOURCE(S): MARPAT 125:223467

AB A star-branched (meth)acrylate polymer has a core portion which is obtained by anionic polymerization of ≥1 unsatd. (meth)acrylate ester of a polyol, and the polymeric arms are obtained by anionic polymerization of ≥1 (meth)acrylic monomer. The star-branched polymers are useful as lubricating oil additives, especially as viscosity improvers. Thus, star-branched polymer was prepared by anionic polymerization of trimethylolpropane trimethacrylate to form the core and anionic polymerization of lauryl methacrylate to form the arms. The star-branched polymer exhibited star/Mw 249,900 and Mw/Mn 1.83.

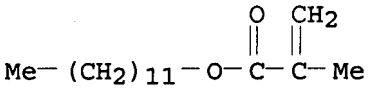
IT **61181-29-1P**, Ethylene glycol dimethacrylate-lauryl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-branched; manufacture of star-branched (meth)acrylate polymers for lubricating oil **additives**)

RN 61181-29-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

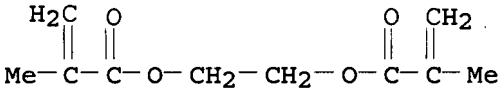
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

CRN 97-90-5
CMF C10 H14 O4



IC ICM C08F297-02
ICS C08F265-00
ICA C10M145-10
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 51
IT **61181-29-1P**, Ethylene glycol dimethacrylate-lauryl methacrylate copolymer **79795-55-4P**
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-branched; manufacture of star-branched (meth)acrylate polymers for lubricating oil **additives**)

L26 ANSWER 29 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:535120 HCAPLUS
DOCUMENT NUMBER: 125:200588
TITLE: Oil **dewaxing** method
INVENTOR(S): Grewal, Rupinder S.; Joyce, Michael E.; Nord, Randall F.
PATENT ASSIGNEE(S): Nalco/Exxon Energy Chemicals, L.P., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5547562	A	19960820	US 1995-450450	19950525

PRIORITY APPLN. INFO.: US 1995-450450 19950525

AB The invention discloses a method for **dewaxing** a hydrocarbon oil in manufacture of lube oil basestocks which comprises adding an oil-soluble poly-C18-22-alkylmethacrylate, e.g., polybehenyl methacrylate, having a mol. weight of .apprx.10,000-2,000,000 daltons to a hydrocarbon oil containing wax; cooling the oil to allow wax

A 2

crystals to form, separating the wax crystals from the oil and recovering a dewaxed oil.

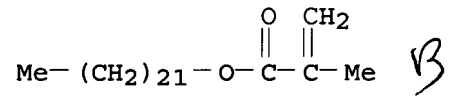
IT **27252-90-0P**
RL: MOA (Modifier or additive use); **PNU (Preparation, unclassified)**; **PREP (Preparation)**; USES (Uses)
(**additive**; oil **dewaxing** method by addition of)

RN 27252-90-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, docosyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 16669-27-5
CMF C26 H50 O2



IC ICM C10G023-00
ICS C10G073-06; C10G073-32

INCL 208024000

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

ST polyalkylmethacrylate **dewaxing** lubricating oil basestock manuf; polybehenyl methacrylate **dewaxing** aid lubricating oil

IT Lubricating oils
(base oils, oil **dewaxing** method by addition of poly-C18-22-alkylmethacrylates in manufacture of)

IT Petroleum refining
(**dewaxing**, method by addition of poly-C18-22-alkylmethacrylates in manufacture of lubricating oil basestocks)

IT **27252-90-0P**
RL: MOA (Modifier or additive use); **PNU (Preparation, unclassified)**; **PREP (Preparation)**; USES (Uses)
(**additive**; oil **dewaxing** method by addition of)

IT 79-41-4DP, Methacrylic acid, C18-22 alkyl esters, polymers
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(**additives**; oil **dewaxing** method by addition of)

L26 ANSWER 30 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:459332 HCAPLUS

DOCUMENT NUMBER: 125:146613

TITLE: Sequential method for the determination of operating conditions for optimizing end-use properties of a terpolymer

AUTHOR(S): Salauen, Philippe; Houzelot, Jean-Leon; Villermaux, Jacques; Marchal, Sylvie

CORPORATE SOURCE: Laboratoire des Sciences du Genie Chimique-CNRS, Ecole Nationale Superieure des Industries Chimiques-INPL, 1 rue Grandville, BP 451, Nancy, 54001, Fr.

SOURCE: Chemical Engineering Journal (Lausanne) (**1996**), 63(1), 19-25
CODEN: CMEJAJ; ISSN: 0300-9467

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An efficient method based on tendency modeling was presented to design operating conditions aimed at optimization of end-use properties of a terpolymer (dodecyl methacrylate-hexadecyl methacrylate-Me methacrylate copolymer) used as a viscosity index improver for lubricating oils. In order to implement this strategy, a copolymn. model and relationships between the terpolymer structure and the properties were set up according to a sequential procedure. Six preliminary runs were required to start the process. Addnl. runs were performed according to the predictions of an adaptive tendency model in order to minimize a performance index related to reaction time and end-use properties of the terpolymer. Quasi-optimal conditions were reached after only four runs calculated according to this method.

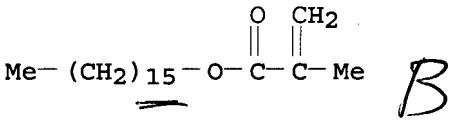
IT **180268-79-5P**
RL: MOA (Modifier or additive use); PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(lubricating oil viscosity index improver; sequential method for determination of operating conditions for optimization of end-use properties of polymethacrylate **additive**)

RN 180268-79-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with hexadecyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

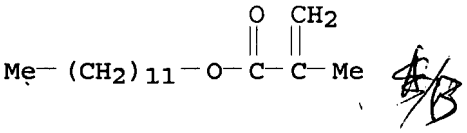
CM 1

CRN 2495-27-4
CMF C20 H38 O2



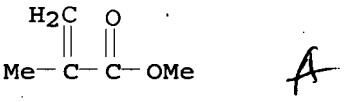
CM 2

CRN 142-90-5
CMF C16 H30 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 35, 38
IT **180268-79-5P**
RL: MOA (Modifier or additive use); PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(lubricating oil viscosity index improver; sequential method for determination of operating conditions for optimization of end-use properties of polymethacrylate **additive**)

L26 ANSWER 31 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:262322 HCAPLUS
DOCUMENT NUMBER: 124:318762
TITLE: Water-dispersible polyisocyanate particles as additives for aqueous polymer emulsions or solutions
INVENTOR(S): Kanetani, Koji
PATENT ASSIGNEE(S): Nippon Polyurethane Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08041153	A	19960213	JP 1994-193806	19940727

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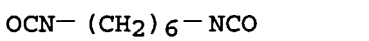
PRIORITY APPLN. INFO.: JP 1994-193806 19940727

<--

AB The title particles are manufactured by reacting a mixture of 100 parts polyisocyanates, and a dispersion stabilizer prepared from 100 parts unsatd. polyols and 20-400 parts C≥2 hydrocarbon side chain-containing ethylenic monomers, 0-100 parts active H compds., and 1-20 parts RO[CH2CH2O]n[R1O]mH (R = C1-4 alkyl; R1 = C3-4 alkylene; m = 0-10; n = 3-120). Thus, polyol prepared from Nippollan 4009 and maleic anhydride was treated with lauryl methacrylate in the presence of AcOBu and benzoyl peroxide to give a dispersion stabilizer which was further reacted with hexamethylene diisocyanate, 1,6-hexamethylene glycol, and polyethylene glycol monomethyl ether to give particles with isocyanate content 11.2% and particle size ≤50 μm. The particles was tested as additives to an adhesive composition
IT **176310-88-6DP**, reaction products with polyalkylene glycol mono-Me ether
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(water-dispersible polyisocyanate particles as **additives** for aqueous polymer emulsions or solns.)
RN 176310-88-6 HCAPLUS
CN Hexanedioic acid, polymer with 1,4-butanediol, 1,6-diisocyanatohexane, dodecyl 2-methyl-2-propenoate, 2,5-furandione and 1,6-hexanediol, graft (9CI) (CA INDEX NAME)

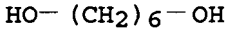
CM 1

CRN 822-06-0
CMF C8 H12 N2 O2



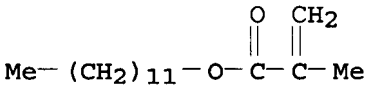
CM 2

CRN 629-11-8
CMF C6 H14 O2



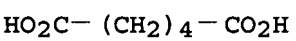
CM 3

CRN 142-90-5
CMF C16 H30 O2



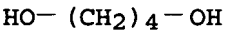
CM 4

CRN 124-04-9
CMF C6 H10 O4



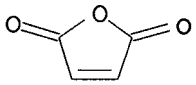
CM 5

CRN 110-63-4
CMF C4 H10 O2



CM 6

CRN 108-31-6
CMF C4 H2 O3



IC ICM C08G018-08
ICS C08G018-66
CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): 38
IT 9004-74-4DP, Polyethylene glycol monomethyl ether, reaction products with polyisocyanates 9063-06-3DP, Polyethylene-polypropylene glycol monomethyl ether, reaction products with polyisocyanates **176310-88-6DP**, reaction products with polyalkylene glycol mono-Me ether **176310-89-7DP**, reaction products with polyalkylene glycol mono-Me ether 176310-90-0DP, reaction products with polyalkylene glycol mono-Me ether
RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); **PREP (Preparation)**; USES (Uses)
(water-dispersible polyisocyanate particles as **additives** for aqueous polymer emulsions or solns.)

L26 ANSWER 32 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:784833 HCAPLUS
DOCUMENT NUMBER: 123:170665
TITLE: Copolymers and their reaction products with amines as additives for fuels and lubricants
INVENTOR(S): Guenther, Wolfgang; Oppenlaender, Knut; Denzinger, Walter; Hartmann, Heinrich; Mach, Helmut; Schwahn, Harald; Rath, Hans Peter
PATENT ASSIGNEE(S): BASF A.-G., Japan
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4330971	A1	19950316	DE 1993-4330971	19930913
CA 2171428	A1	19950323	CA 1994-2171428 <--	19940906
WO 9507944	A1	19950323	WO 1994-EP2963 <--	19940906
W: AU, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, NO, NZ, PL, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9476944	A	19950403	AU 1994-76944	19940906

			<--	
BR 9407488	A	19960625	BR 1994-7488	199409 06
			<--	
EP 719290	A1	19960703	EP 1994-927566	199409 06
			<--	
EP 719290	B1	19970813		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
HU 74108	A2	19961128	HU 1996-626	199409 06
			<--	
JP 09502475	T	19970311	JP 1994-508952	199409 06
			<--	
AT 156844	T	19970815	AT 1994-927566	199409 06
			<--	
ES 2105754	T3	19971016	ES 1994-927566	199409 06
			<--	
FI 9601147	A	19960312	FI 1996-1147	199603 12
			<--	
NO 9601013	A	19960313	NO 1996-1013	199603 12
			<--	
US 6284716	B1	20010904	US 1996-605073	199603 12
			<--	
US 2001025094	A1	20010927	US 2001-848281	200105 04
			<--	
US 6512055	B2	20030128		
PRIORITY APPLN. INFO.:			DE 1993-4330971 A	199309 13
			<--	
			WO 1994-EP2963 W	199409 06
			<--	
			US 1996-605073 A1	199603 12
			<--	

AB The title polymers are prepared from unsatd. C4-6 dicarboxylic acids or anhydrides 20-60, propene oligomers or branched C4-10 α-olefins (average mol. weight 300-5000) 10-70, and comonomers 1-50 mol%. Peroxide-initiated polymerization of maleic anhydride 98,

oligoisobutene (mol. weight 1000) 900, and C20-24 α-olefins 29.6 g at 150° gave a copolymer (mol. weight 3500) which was heated in xylene with 1-aminoethylpiperazine (anhydride-amine mol ratio 1.5:1) at 70°. Use of the products as dispersants for lubricating oils is exemplified.

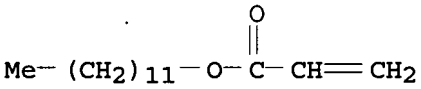
IT **167544-59-4DP**, reaction products with amines
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(copolymers and their reaction products with amines as **additives** for fuels and lubricants)

RN 167544-59-4 HCAPLUS

CN 2-Propenoic acid, dodecyl ester, polymer with 2,5-furandione and 2-methyl-1-propene (9CI) (CA INDEX NAME)

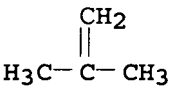
CM 1

CRN 2156-97-0
CMF C15 H28 O2



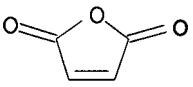
CM 2

CRN 115-11-7
CMF C4 H8



CM 3

CRN 108-31-6
CMF C4 H2 O3



IC ICM C08F255-00
ICS C08F222-04; C08F222-02; C08F210-06; C08F210-08; C08F210-14; C08F008-32; C10M145-16; C10L001-22; C10M149-06

ICA C08F255-02; C08F255-08

ICI C08F255-00, C08F222-04, C08F222-02, C08F220-06, C08F220-16, C08F222-10, C08F216-18, C08F210-14

CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 51

IT 108-31-6DP, 2,5-Furandione, polymers with oligoisobutenes and α-olefins, reaction products with amines 109-55-7DP, reaction products with maleic anhydride copolymers 112-24-3DP,

Triethylenetetramine, reaction products with maleic anhydride copolymers 115-11-7DP, oligomers, polymers with maleic anhydride and α-olefins, reaction products with amines 140-31-8DP, 1-Piperazineethanamine, reaction products with maleic anhydride copolymers 6531-38-0DP, 1,4-Piperazinediethanamine, reaction products with maleic anhydride copolymers 9046-10-0DP, reaction products with maleic anhydride copolymers 43159-43-9DP, reaction products with amines 91778-13-1DP, reaction products with amines **167544-59-4DP**, reaction products with amines 167544-60-7DP, reaction products with amines 167544-61-8DP, reaction products with amines **167544-62-9DP**, reaction products with amines 167544-63-0DP, reaction products with amines 167631-97-2DP, reaction products with amines
RL: **IMF (Industrial manufacture)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(copolymers and their reaction products with amines as **additives** for fuels and lubricants)

L26 ANSWER 33 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:689704 HCAPLUS
DOCUMENT NUMBER: 121:289704
TITLE: Desensitizing ink for pressure-sensitive copying paper
INVENTOR(S): Furukawa, Akira; Suzaki, Katsumitsu
PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06064311	A	19940308	JP 1992-221818	19920820 <--
JP 3213637	B2	20011002		

PRIORITY APPLN. INFO.: JP 1992-221818 19920820 <--

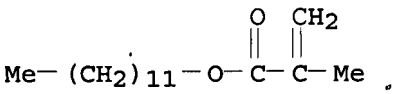
AB In the title ink comprises at least a white pigment, a vehicle, and a desensitizer, the ink further contains a dissolved or dispersed resin which is obtained by polymerizing a monomer soluble in aliphatic hydrocarbon but insol. after polymerization, in the presence of a polymer which has a polymerizable double bond on the end or branch chain, and is soluble in the aliphatic hydrocarbon.

IT **141553-72-2P**
RL: **SPN (Synthetic preparation)**; **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(prepared as resin **additive** used in desensitizing ink)

RN 141553-72-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-propenoic acid, graft (9CI) (CA INDEX NAME)

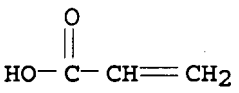
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

CRN 79-10-7
CMF C3 H4 O2



IC ICM B41M005-128
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 116357-14-3P, 2-Ethylhexyl methacrylate-N-vinyl-2-pyrrolidone graft copolymer **141553-72-2P 158687-56-0P 158687-57-1P** 158687-58-2P 158799-15-6P
RL: **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(prepared as resin **additive** used in desensitizing ink)
IT **27401-06-5DP**, Methacrylic acid-stearyl methacrylate copolymer, carboxy-terminated, ester with glycidyl methacrylate **125052-36-0P 141415-29-4P** 159002-51-4P
RL: RCT (Reactant); **SPN (Synthetic preparation)**; **PREP (Preparation)**; RACT (Reactant or reagent)
(prepared for preparing resin **additive** used in desensitizing ink)

L26 ANSWER 34 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:608945 HCAPLUS
DOCUMENT NUMBER: 121:208945
TITLE: Copolymer useful as a pour point depressant additive for a lubricating oil
INVENTOR(S): Gore, Robert H.; O'Mara, James H.
PATENT ASSIGNEE(S): Rohm and Haas Co., USA
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5312884	A	19940517	US 1993-55131	199304 30
US 5368761	A	19941129	US 1994-196674 <--	

199402
15
<--
CA 2112317 C 20050517 CA 1994-2112317
199403
01
<--
CN 1094438 A 19941102 CN 1994-104070
199403
30
<--
CN 1045617 B 19991013
HU 69301 A2 19950928 HU 1994-1128
199404
19
<--
FI 9401858 A 19941031 FI 1994-1858
199404
21
<--
NO 9401447 A 19941031 NO 1994-1447
199404
21
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ZA 9402758 A 19941109 ZA 1994-2758
199404
21
<--
EP 623665 A2 19941109 EP 1994-302874
199404
22
<--
EP 623665 A3 19950628
EP 623665 B1 20000628
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE
AT 194165 T 20000715 AT 1994-302874
199404
22
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BR 9401621 A 19941122 BR 1994-1621
199404
27
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JP 07048421 A 19950221 JP 1994-113564
199404
28
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PRIORITY APPLN. INFO.: US 1993-55131 A3
199304
30
<--

AB The title additive comprises a copolymer containing C8-15 alkyl (meth)acrylate monomer 15-67, C16-24 alkyl (meth)acrylate monomer 3-40, and C1-4 alkyl (meth)acrylate monomer 30-65 mol%. Thus, a lubricating base oil was blended with 0.15 weight% of a copolymer (containing 19.8:56.6:33.6 mol ratio of cetyl-eicosyl methacrylate and laurylmyristyl methacrylate and Me methacrylate), resulting in the decreasing of its pour point from -21° to -39°.

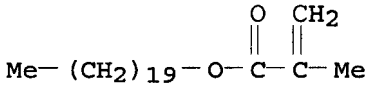
IT **63197-48-8P**
RL: MOA (Modifier or additive use); **SPN (Synthetic**

preparation); **PREP (Preparation)**; USES (Uses)
(pour-point depressant **additive** for lubricating oils)

RN 63197-48-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, eicosyl ester, polymer with hexadecyl 2-methyl-2-propenoate, isodecyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

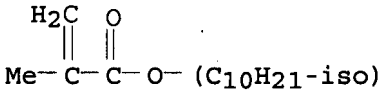
CM 1

CRN 45294-18-6
CMF C24 H46 O2



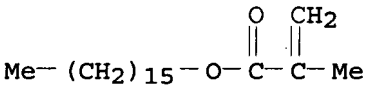
CM 2

CRN 29964-84-9
CMF C14 H26 O2
CCI IDS



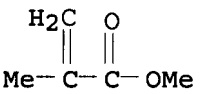
CM 3

CRN 2495-27-4
CMF C20 H38 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08F220-10
ICS C08F220-68
INCL 526328000
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
IT **63197-48-8P 158091-30-6P 158091-32-8P**

RL: MOA (Modifier or additive use); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(pour-point depressant **additive** for lubricating oils)

L26 ANSWER 35 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:672676 HCAPLUS
DOCUMENT NUMBER: 119:272676
TITLE: Prevention of bleeding of resin additives
INVENTOR(S): Inaoka, Susumu; Onda, Yoshuki
PATENT ASSIGNEE(S): Nippon Catalytic Chem Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05214114	A	19930824	JP 1992-16151	19920131

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PRIORITY APPLN. INFO.: JP 1992-16151 19920131

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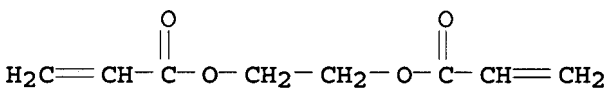
AB In compns. of plastics and/or elastomers and additives, bleeding and migration of the additives are prevented by addition of 0.01-50 parts (based on 100 parts compns.) oil-absorbing crosslinked copolymers of 96-99.999% monomers having 1 polymerizable unsatd. group, containing mainly monomers with solubility parameter (SP) ≤9, and 0.001-4% crosslinking monomers having ≥2 polymerizable unsatd. groups. Thus, 99.794 parts nonylphenyl acrylate (SP 8.3) and 0.206 part 1,6-hexanediol diacrylate were polymerized in the presence of Bz2O2 to give a crosslinked copolymer (I). A composition of PVC 100, I 0.5, DOP 35, epoxidized soybean oil 2, Ba-Zn 2, and PEG monolaurate 2 parts was rolled at 150° to give a 0.6-mm sheet with light transmittance 91.0% initially and 85.2% after 3-mo outdoor exposure.

IT **137560-18-0P**, Dodecyl acrylate-ethylene glycol diacrylate copolymer
RL: **PREP (Preparation)**
(preparation of, bleeding and migration inhibitors, for resin and rubber **additives**)
RN 137560-18-0 HCAPLUS
CN 2-Propenoic acid, 1,2-ethanediyl ester, polymer with dodecyl 2-propenoate (9CI) (CA INDEX NAME)

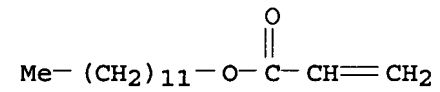
CM 1

CRN 2274-11-5
CMF C8 H10 O4



CM 2

CRN 2156-97-0
CMF C15 H28 O2



IC ICM C08J003-20
ICS C08J003-24; C08K005-00; C08L101-00
ICI C08L023-10, C08L025-00, C08L027-06, C08L033-06
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 39
IT **137560-18-0P**, Dodecyl acrylate-ethylene glycol diacrylate copolymer **141029-36-9P**, Divinylbenzene-hexadecyl methacrylate-N-octylmethacrylamide copolymer 141029-37-0P 141053-20-5P, 1,6-Hexanediol diacrylate-nonylphenyl acrylate copolymer **141055-62-1P** 146268-63-5P, tert-Butylstyrene-1-decene-divinylbenzene copolymer **147527-61-5P** 151486-99-6P 151542-76-6P 151542-77-7P 151542-78-8P
RL: **PREP (Preparation)**
(preparation of, bleeding and migration inhibitors, for resin and rubber **additives**)

L26 ANSWER 36 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:429224 HCAPLUS
DOCUMENT NUMBER: 119:29224
TITLE: Manufacture of colored spherical polymer particles
INVENTOR(S): Kitahara, Shizuo
PATENT ASSIGNEE(S): Nippon Zeon Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05005003	A	19930114	JP 1991-271831	199109 25
PRIORITY APPLN. INFO.:			JP 1990-256299 <--	A1 199009 26

AB The title particles are manufactured by dissolving and dispersing C:N+ bond-containing compds. and colorants in polymerizable monomers, followed by polymerizing the monomers. Thus, 100 g 1-eicosene was treated with 1 mol benzylidenestearylamine-acetyl chloride and 1 mol TiCl4 in C6H6 to give a C:N+ bond-containing compound, 2 parts of which was mixed with styrene 100, divinylbenzene 0.3, and carbon black 6,

and AIBN 0.5 part to give a composition, which was stirred in 997 parts deionized water dissolving 3 parts poly(vinyl alc.) at 80° for 6 h to give a suspension of polymer particles, which was centrifuged, washed with water, then dried in vacuo to give colored spherical particles with particle size 7.60 μm showing good dispersibility of the inorg. colorant.

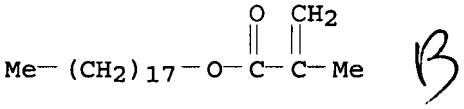
IT **142914-08-7P**
RL: **PREP (Preparation)**
(preparation of, for **additives** for manufacture of colored vinyl polymer particles)

RN 142914-08-7 HCAPLUS

CN 4H-1,3-Oxazinium, 5,6-dihydro-3-methyl-2-(1-methylethenyl)-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with ethenylbenzene and octadecyl (2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

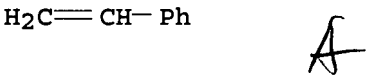
CRN 32360-05-7
CMF C22 H42 O2



B

CM 2

CRN 100-42-5
CMF C8 H8



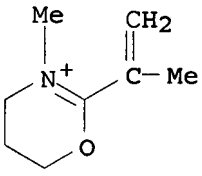
A

CM 3

CRN 142914-07-6
CMF C8 H14 N O . C7 H7 O3 S

CM 4

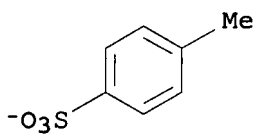
CRN 142914-06-5
CMF C8 H14 N O



CM 5

CRN 16722-51-3

CMF C7 H7 O3 S



IC ICM C08F002-44
ICS C08F002-02; C08J003-00; C08J003-12; C08J003-20; C09C003-10
ICI C08L035-06
CC 37-3 (Plastics Manufacture and Processing)
IT 9003-55-8DP, reaction products with methylpyrrolidone 9003-55-8P
142914-08-7P 148388-43-6P
RL: **PREP (Preparation)**
(preparation of, for **additives** for manufacture of colored vinyl polymer particles)

L26 ANSWER 37 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:216263 HCAPLUS
DOCUMENT NUMBER: 118:216263
TITLE: Electroviscous fluids
INVENTOR(S): Okada, Izuho; Asako, Yoshinobu; Kobayashi, Minoru
PATENT ASSIGNEE(S): Nippon Shokubai K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04096997	A	19920330	JP 1990-214392	199008 15

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PRIORITY APPLN. INFO.: JP 1990-214392 199008 15

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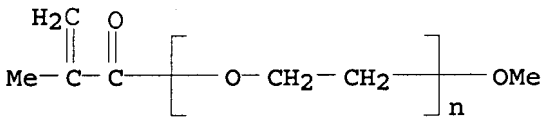
AB Electroviscous fluids comprise a dispersing medium and polymeric additive. The additive is prepared by polymerizing vinyl monomers (I) in the presence of polymers (II) having vinyl groups at terminals. The polymers (II) comprise main chains having the structural units of (CHR1CHR2O) (R1 and R2 are independently H or Me) and/or structural units of (CH2CR3X) (R3 = H or Me, X is aromatic hydrocarbyl group or O or N-containing substituents) and have an average mol. weight of 300-100,000. The weight ratio of II:I is (0.1-05):5-99.9). An additive was prepared by polymerizing NK Easter M 230G and dodecyl methacrylate.
IT **74418-73-8P**
RL: **PREP (Preparation)**
(**additive**, preparation of, for electroviscous fluids)
RN 74418-73-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-

ethanediyl) (9CI) (CA INDEX NAME)

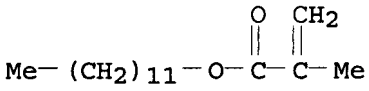
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 2

CRN 142-90-5
CMF C16 H30 O2



IC ICM C10M157-06
ICS B01J013-00
ICI C10M157-06, C10M145-24, C10M143-10, C10M151-02; C10N020-04, C10N020-06, C10N040-14
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 76
IT **74418-73-8P 147488-66-2P** 147488-67-3P **147488-68-4P** 147488-69-5P 147554-62-9P
RL: **PREP (Preparation)**
(**additive**, preparation of, for electroviscous fluids)

L26 ANSWER 38 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:574865 HCAPLUS
DOCUMENT NUMBER: 117:174865
TITLE: Electroviscous fluids
INVENTOR(S): Okada, Izuho; Asako, Yoshinobu; Kobayashi, Minoru
PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04007397	A	19920110	JP 1990-107427	19900425

PRIORITY APPLN. INFO.: JP 1990-107427 <--

199004
25
<--

AB Electroviscous fluids comprise a dispersing phase of organic polymer particles having cation-exchanging capacity and a dispersing medium of insulating fluid containing mainly hydrocarbon compds. and a polymer additive. The polymer additive having average mol. weight of 1000-1,000,000 comprises 0.1-60 weight% structural units of (A) having the general formula (CH2CR1X), where R1 = H or CH3, X = 2-pyridine, 4-pyridine, 2-pyrrolidone, or CN, and 40-99.9 weight% structural units of (B) having the general formula (CH2CR2Y), where R2 = H or CH3, Y = aromatic hydrocarbyl group. The organic polymers are sulfonate-containing or sulfonate-containing polystyrene-series polymers. An example of the polymer additive is Bu methacrylate-styrene-4-vinylpyridine copolymer.

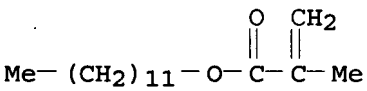
IT **35725-18-9P**, Acrylonitrile-lauryl methacrylate-styrene copolymer
RL: **PREP (Preparation)**
(preparation of, dispersing medium **additive**, for electroviscous fluids)

RN 35725-18-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenylbenzene and 2-propenenitrile (9CI) (CA INDEX NAME)

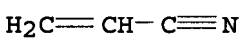
CM 1

CRN 142-90-5
CMF C16 H30 O2



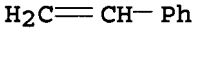
CM 2

CRN 107-13-1
CMF C3 H3 N



CM 3

CRN 100-42-5
CMF C8 H8



IC ICM C10M157-06
ICS B01J013-00

ICI C10M157-06, C10M149-10, C10M151-02; C10N020-04, C10N020-06, C10N040-14

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

IT 31442-68-9P, Butyl methacrylate-styrene-4-vinylpyridine copolymer
35725-18-9P, Acrylonitrile-lauryl methacrylate-styrene copolymer 53761-76-5P, Butyl methacrylate-4-vinylpyridine copolymer **76259-41-1P** 143987-81-9P
RL: **PREP (Preparation)**
(preparation of, dispersing medium **additive**, for electroviscous fluids)

L26 ANSWER 39 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:534332 HCAPLUS
DOCUMENT NUMBER: 117:134332
TITLE: Electroviscous fluids
INVENTOR(S): Okada, Izuho; Asako, Yoshinobu; Kobayashi, Minoru
PATENT ASSIGNEE(S): Nippon Shokubai K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04081496	A	19920316	JP 1990-165780	19900626

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PRIORITY APPLN. INFO.: JP 1990-165780 19900626

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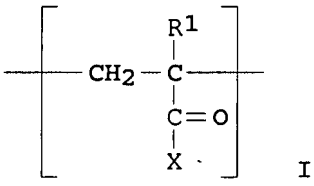
GI



I

AB The electroviscous fluid is prepared by dispersing organic polymer particles having cation exchanging ability into a hydrocarbon medium with addition of a polymer having average mol. weight 103 to 108 and comprising 0.1-60 repeating unit (I), where R1 = H or Me and X = NR2R3 or OR4 (R2, R3 = H or C1-4 alkyl; R4 = C1-4 alkyl, (CHR5CHR4O)nR7 or CH2CHR8NR9R10, where R5, R6 = H or Me; R7 = H, Me or Et; n = 1-30; R8 = H or Me; R9, R10 = H or C1-4 alkyl) and 40-99.9 weight% repeating unit CH2(R11)C(Y), where R11 = H or Me and Y = aromatic hydrocarbon.

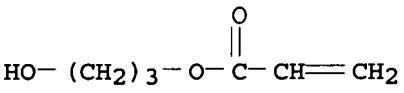
IT **105899-32-9P**
RL: **PREP (Preparation)**
(**additives** for electroviscous fluids, preparation of)

RN 105899-32-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with

ethenylbenzene and 3-hydroxypropyl 2-propenoate (9CI) (CA INDEX NAME)

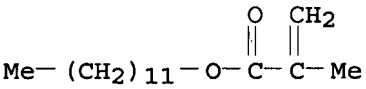
CM 1

CRN 2761-08-2
CMF C6 H10 O3



CM 2

CRN 142-90-5
CMF C16 H30 O2



CM 3

CRN 100-42-5
CMF C8 H8

IC ICM C10M157-08
ICS B01J013-00
ICI C10M157-08, C10M145-14, C10M151-02; C10N020-04, C10N020-06, C10N040-14
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
IT 25034-86-0P 25213-39-2P 29760-26-7P, N,N-Dimethylacrylamide-styrene copolymer 52858-80-7P **105899-32-9P** **143301-70-6P** 143301-73-9P **143301-74-0P**
RL: **PREP (Preparation)**
(**additives** for electroviscous fluids, preparation of)

L26 ANSWER 40 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:424121 HCAPLUS
DOCUMENT NUMBER: 111:24121
TITLE: Peroxide-induced telomerization at high temperatures for grafting of unsaturated nitrogen compounds on polyolefins
INVENTOR(S): McCrary, Thomas J.
PATENT ASSIGNEE(S): Exxon Research and Engineering Co., USA
SOURCE: U.S., 6 pp. Cont. of U.S. Ser. No. 557,253, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4810754	A	19890307	US 1985-797385	198511 12
			<--	
PRIORITY APPLN. INFO.:			US 1983-557253	A1 198312 02
			<--	

AB In the title process, useful in the production of dispersants and viscosity index improvers for lubricating oils, N-containing monomers and dialkyl peroxides yielding 3-10 mol radicals/mol on decomposition are added slowly to α-olefin-C2H4 copolymers (mol. weight 10,000-250,000) in mineral oils at 190-250°. Adding 2.3 lb 2-vinylpyridine in 8.0 lb neutral mineral oil and 0.8 lb tert-Bu2O2 in 9.0 lb mineral oil over 45 min to 125 lb 12% mineral oil solution of C2H4-C3H6 copolymer [sonic breakdown (ASTM D-2603) 32.2%; viscosity of solution 109.1 St at 100°) stirred at 190-195°, cooling to 150°, and adding 20.0 lb mineral oil gave a 9% oil solution of graft polymer with viscosity 1381 cSt at 100°, haze 35, sediment (10 g in 90 g heptane) 0.025 volume%, and N content of isolated polymer 0.14%.

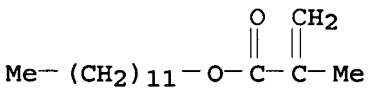
IT **121284-28-4P**
RL: **IMF (Industrial manufacture); PREP (Preparation)**
(manufacture of, for lubricating oil **additives**)

RN 121284-28-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethene, 2-ethenylpyridine and 1-propene, graft (9CI) (CA INDEX NAME)

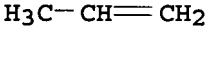
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

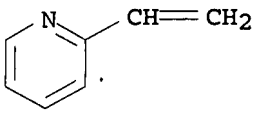
CRN 115-07-1
CMF C3 H6



CM 3

CRN 100-69-6

CMF C7 H7 N



CM 4

CRN 74-85-1
CMF C2 H4

$H_2C{=}CH_2$

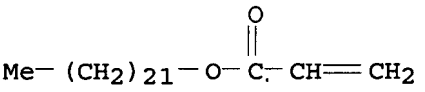
IC ICM C08F004-32
ICS C08F255-02; C08F255-04
INCL 525264000
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 51
IT 109800-38-6P 119779-18-9P, Acrylonitrile-ethylene-propylene graft copolymer **121284-28-4P** 121284-29-5P 121284-30-8P
RL: **IMF (Industrial manufacture)**; **PREP (Preparation)**
(manufacture of, for lubricating oil **additives**)

L26 ANSWER 41 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:575580 HCAPLUS
DOCUMENT NUMBER: 105:175580
TITLE: Crystallization of paraffins by **additives** - filtration of the precipitates
AUTHOR(S): Giorgio, S.; Kern, R.
CORPORATE SOURCE: Cent. Natl. Rech. Sci., Marseille, Fr.
SOURCE: Addit. Schmierst. Arbeitsfluessigkeiten, Int. Kolloq., 5th (**1986**), Volume 2, 8/7/1-8/7/11. Editor(s): Bartz, Wilfried J. Tech. Akad. Esslingen: Ostfildern, Fed. Rep. Ger.
CODEN: 55FNAS
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In **dewaxing** of petroleum, the use of **additives**, i.e., polyethylene [9002-88-4] and poly(docosyl acrylate) [**25703-24-6**], changes the morphol. of the paraffin crystals drastically, thus making the filtration of the paraffins easier.
IT **25703-24-6**
RL: USES (Uses)
(**additives**, for paraffin crystallization in petroleum **dewaxing**)
RN 25703-24-6 HCAPLUS
CN 2-Propenoic acid, docosyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 18299-85-9

CMF C25 H48 O2



CC 51-11 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 75
ST petroleum **dewaxing** paraffin crystn **additive**
IT Alkanes, properties
RL: PRP (Properties)
(crystallization of, **additives** for, in petroleum **dewaxing**)
IT Petroleum
RL: USES (Uses)
(**dewaxing** of, paraffin crystallization by **additives** in)
IT Crystallization
(of paraffins, **additives** for, in petroleum **dewaxing**)
IT 9002-88-4 **25703-24-6**
RL: USES (Uses)
(**additives**, for paraffin crystallization in petroleum **dewaxing**)
IT 544-85-4 630-06-8 4181-95-7
RL: USES (Uses)
(crystallization and filtration of, **additives** for, petroleum **dewaxing** in relation to)

L26 ANSWER 42 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:28182 HCAPLUS
DOCUMENT NUMBER: 102:28182
TITLE: A wax-containing crude oil or fuel oil comprising a pour point depressant
INVENTOR(S): Eckert, Rudolf Josef Albrecht; Vos, Bron
PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V., Neth.
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 120512	A2	19841003	EP 1984-200214	19840217
			<--	
EP 120512	A3	19841128		
R: BE, DE, FR, GB, IT, NL				
CA 1231659	A1	19880119	CA 1984-448115	19840223
			<--	
JP 59179591	A	19841012	JP 1984-50794	

198403
15
<--

IN 166642 A1 19900630 IN 1984-MA170

198403
15
<--

PRIORITY APPLN. INFO.: GB 1983-7522 A

198303
18
<--

AB A waxy crude oil or a waxy residual oil contains a small amount of a branched-backbone polymer having predominantly aliphatic side chains as a pour-point depressant. Thus, copolymers of behenyl acrylates are suitable compds.

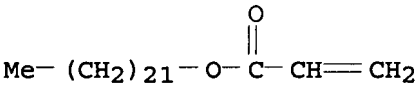
IT **93975-41-8P**
RL: PREP (Preparation)
(manufacture of, as petroleum pour-point depressant and **dewaxing** aid)

RN 93975-41-8 HCAPLUS

CN 2-Propenoic acid, 1,4-butanediyl ester, polymer with docosyl 2-propenoate (9CI) (CA INDEX NAME)

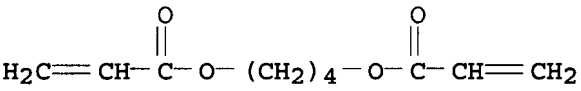
CM 1

CRN 18299-85-9
CMF C25 H48 O2



CM 2

CRN 1070-70-8
CMF C10 H14 O4



IC C10L001-18; C10L001-22
CC 51-10 (Fossil Fuels, Derivatives, and Related Products)
ST waxy oil pour depressant; pour point depressant petroleum; fuel oil pour depressant; bright stock **dewaxing** agent; petroleum **dewaxing** acrylic polymer; behenyl acrylate polymer pour depressant

IT Acrylic polymers, uses and miscellaneous
RL: USES (Uses)
(**dewaxing** aids and pour-point depressants, in petroleum refining)

IT Petroleum refining residues
(bright stocks, **dewaxing** of, polymeric agents in)

IT Petroleum refining
(**dewaxing**, of bright stocks, polymeric agents for)

IT Fuel oil **additives**
(pour-point depressants, behenyl acrylate copolymers, manufacture and properties of)
IT **93975-41-8P 93975-42-9P**
RL: PREP (Preparation)
(manufacture of, as petroleum pour-point depressant and **dewaxing** aid)
IT **93975-90-7P**
RL: PREP (Preparation)
(manufacture of, as pour-point depressants for fuel oils)

L26 ANSWER 43 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:88515 HCAPLUS
DOCUMENT NUMBER: 100:88515
TITLE: Oil-based composition for cold rolling of aluminum
INVENTOR(S): Balazs, Tibor; Dzsaja, Lajos; Fulop, Janos; Gabor, Laszlo; Gyongyossy, Lajos; Keresztessy, Zsolt; Keresztessy, Zsolt, Mrs.
PATENT ASSIGNEE(S): Magyar Szenhidrogenipari Kutato-Fejleszto Intezet, Hung.; Tiszai Koolajipari Vallalat; Aluminuimipari Tervezo Vallalat (ALUTERV); Szekesfehervari Konnyufemmu
SOURCE: Hung. Teljes, 17 pp.
CODEN: HUXXBU
DOCUMENT TYPE: Patent
LANGUAGE: Hungarian
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 25938	A2	19830829	HU 1978-NA1114	197810 18
			<--	
HU 182909	B	19840328		
CS 210037	B1	19820129	CS 1979-6882	197910 10
			<--	
DD 146467	A1	19810211	DD 1979-216230	197910 15
			<--	
RO 78719	A1	19821206	RO 1979-98953	197910 16
			<--	
SU 1153836	A3	19850430	SU 1979-2832503	197910 16
			<--	
PL 118347	B1	19810930	PL 1979-219012	197910 17
			<--	
PRIORITY APPLN. INFO.:			HU 1978-NA1114 A	197810

18

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AB Cold rolling compns. for Al contain: **deparaffinized** base oil (b.p. 200-350°, pour point <0°, <0.1 weight% S, <0.1 mg KOH/g acid number, 4-6 mm2/s viscosity at 20°, and <10 mg I/100 g I-Br mo.) and 1-10 weight% **additive** composition composed of ≥1 C8-18 aliphatic alc. 10-75, an ester of a C8-18 aliphatic alc. or its mixture with C2-4 aliphatic carbonic acid 20-60, and an alkanolamine ester or ester salt of formulas: R2R2N(CN2)xOR1 (I) or R2R3N+H(CH2)xOH R1O- [where R1 = SO3(CH2)yCH3 or PO[O(CH2)yCH3]O(CH2)CH3 (in which y and z are 8-18), R2 and R3 = H, C1-5 hydroxyalkyl or (CH2)xOEst, x = 1-3 (preferably 2) and Est = C8-20 saturated or unsatd. straight-chain carboxylic acid residue] 1-30 weight%. The 3 components work synergistically. The rolling composition also contains adhesion improver polymers. Thus, a composition containing base oil 95, polyisobutylene [9003-27-4] (mol. weight 5000) 2, C8-18 aliphatic alc. mixture 1, C10-18-alkyl acetate 1.5, I [x = 2, R1 = SO3(CH2)12CH3, R2 = R3 = (CH2)2O2C(CH2)CH3] [88273-27-2] 0.5% gave good results in the 4-ball friction test and in the Amsler A 135 instrument test.

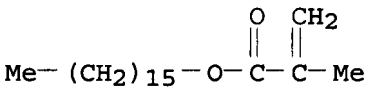
IT **25986-80-5**
RL: USES (Uses)
(lubricants containing, for cold rolling of aluminum)

RN 25986-80-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 2495-27-4
CMF C20 H38 O2



IC C10M001-26

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 56

IT 64-19-7D, C8-18 alkyl esters 79-09-4D, C12-14 aliphatic esters 79-41-4D, alkyl esters, polymers 112-53-8 3724-61-6 4568-28-9 7664-38-2D, C10-19 mixed alkyl esters 9003-27-4 13961-86-9 **25986-80-5** 88262-53-7 88262-54-8 88262-55-9 88273-27-2
RL: USES (Uses)
(lubricants containing, for cold rolling of aluminum)

L26 ANSWER 44 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:207039 HCAPLUS
DOCUMENT NUMBER: 90:207039
TITLE: Lubricating oils containing dithiophosphorylated copolymers of aziridinylethyl acrylates or methacrylates and alkyl acrylates or methacrylates
INVENTOR(S): Pellegrini, John P., Jr.; Thayer, Helen I.
PATENT ASSIGNEE(S): Gulf Research and Development Co., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4136042	A	19790123	US 1977-843315	197710 18
			<--	
PRIORITY APPLN. INFO.:			US 1977-843315 A	197710 18
			<--	

AB A lubricant composition having good viscosity-index, pour-point, and extreme-pressure properties contains an O,O-di-Bu dithiophosphate derivative (I) of 2-(1-aziridinyl)ethyl methacrylate-lauryl methacrylate copolymer [55527-33-8]. I was prepared by treating, under N, a mixture of 10 g O,O-di-Bu H dithiophosphate [2253-44-3] and 3.38 g 2-(1-aziridinyl)ethyl methacrylate in 100 mL C6H6 at 80°C for 3 h, adding the crude product to 200 g light neutral mineral oil (viscosity index 101 and pour point -5°F) containing 96.5 g lauryl methacrylate and 0.66 g azobisisobutyronitrile, and heating the mixture at 65°C for 12 h. At 3 weight% treating level in a base oil having viscosity index 101 and pour point -5°F, I gave a viscosity index of 182 and a pour point of -55°F. Other compns. of fuel oils and synthetic lubricants containing I and O,O-bis(octylphenyl)dithiophosphate derivative of I were also prepared An antiwear test of the copolymer I was devised.

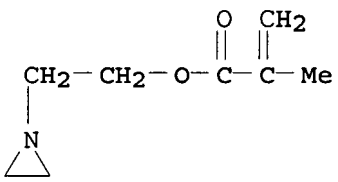
IT **55527-33-8DP**, reaction products with di-Bu hydrogen dithiophosphate
RL: **PREP (Preparation)**
(lubricating-oil **additives**, manufacture and properties of)

RN 55527-33-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(1-aziridinyl)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

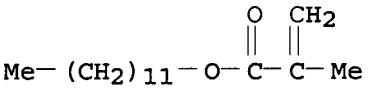
CM 1

CRN 6498-81-3
CMF C8 H13 N O2



CM 2

CRN 142-90-5
CMF C16 H30 O2



IC C10M001-48
INCL 252046700
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 37
IT 2253-44-3DP, reaction products with aziridinylethyl methacrylate-lauryl methacrylate copolymers 29256-95-9DP, reaction products with aziridinylethyl methacrylate-lauryl methacrylate copolymer **55527-33-8DP**, reaction products with di-Bu hydrogen dithiophosphate 70290-08-3DP, reaction products with di-Bu hydrogen dithiophosphate
RL: **PREP (Preparation)**
(lubricating-oil **additives**, manufacture and properties of)

L26 ANSWER 45 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:532254 HCAPLUS
DOCUMENT NUMBER: 89:132254
TITLE: Methacrylic polymer-based additive for lubricating oils
INVENTOR(S): Iordache, Gheorghe; Balliu, Sotir; Alboteanu, Gheorghe; Iordache, Maria; Olteanu, Maria; Luca, Paula
PATENT ASSIGNEE(S): Institutul de Cercetari si Proiectari Tehnologice pentru Rafinarii si Instalatii Petrochimice, Rom.
SOURCE: Rom., 3 pp.
CODEN: RUXXA3
DOCUMENT TYPE: Patent
LANGUAGE: Romanian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 60229	A2	19760615	RO 1974-77618	197402 12

<--

PRIORITY APPLN. INFO.: RO 1974-77618 A 197402 12

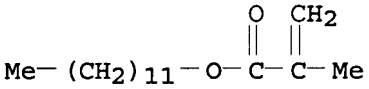
<--

AB Polymethacrylate viscosity-index improvers and pour-point depressants for lubricating oils are prepared by polymerization of a methacrylate ester at 70-120° in the presence of Bz2O2 or azobisisobutyronitrile and by dissolving the polymer in a paraffinic oil. The methacrylate esters are prepared by esterification of methacrylic acid [79-41-4] or transesterification of Me methacrylate [80-62-6] with C4-20 alcs. in the presence of H2SO4 as catalyst, hydroquinone as polymerization inhibitor, and a heavy mineral oil or a furfural extract from the refining of mineral oils (containing 0.1-0.3% S), which also functions as a polymerization inhibitor.
IT **25719-52-2P**
RL: **PREP (Preparation)**
(lubricating oil **additives**, manufacture of)

RN 25719-52-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 142-90-5
CMF C16 H30 O2

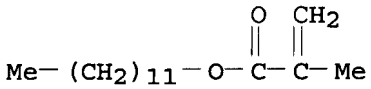


IC C10M001-00
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 37
IT 79-10-7DP, esters with C10-11 alcs., polymers 25719-51-1P **25719-52-2P 25986-80-5P**
RL: **PREP (Preparation)**
(lubricating oil **additives**, manufacture of)

L26 ANSWER 46 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:532005 HCAPLUS
DOCUMENT NUMBER: 89:132005
TITLE: Preparation of highly monodispersed multiple sequence copolymers and applications in lubricants
AUTHOR(S): Gallot, Y.
CORPORATE SOURCE: Cent. Rech. Macromol., Strasbourg, Fr.
SOURCE: Informations Chimie (**1978**), 174, 227-30
CODEN: INFCA8; ISSN: 0020-045X
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Several bi- and trisequenced copolymers of alkyl methacrylates were prepared with Na diphenylmethyl or Na naphthalene as polymerization promoters. The polymers were fractionated with solvents, and the fractions were characterized by gel chromatog., light diffusion, osmometry, and elemental anal. The polymers prepared were ethyl methacrylate-hexyl methacrylate copolymer [61757-33-3] and ethyl methacrylate-dodecyl methacrylate copolymer [**61798-37-6**], and 2 different types of each were studied. The polymers are intended for use as highly monodisperse lubricating oil **additives.**
IT **61798-37-6P**
RL: **PREP (Preparation)**
(lubricating oil **additives**, preparation and properties of)
RN 61798-37-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

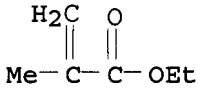
CM 1

CRN 142-90-5
CMF C16 H30 O2



CM 2

CRN 97-63-2
CMF C6 H10 O2



CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 37
IT 61757-33-3P **61798-37-6P**
RL: **PREP (Preparation)**
(lubricating oil **additives**, preparation and properties of)

L26 ANSWER 47 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:604146 HCAPLUS
DOCUMENT NUMBER: 87:204146
TITLE: Polymer additive for dispersion of sludge in lubricants and fuels
PATENT ASSIGNEE(S): Exxon Research and Engineering Co., USA
SOURCE: Fr. Demande, 25 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

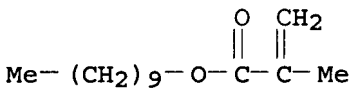
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2309583	A1	19761126	FR 1975-13872 <--	197505 02
FR 2309583	B1	19781006		
PRIORITY APPLN. INFO.:			FR 1975-13872 A <--	197505 02

AB The lubricating oil dispersant was prepared by treating an aliphatic polyamine NH2(CH2)n(NH(CH2)n)mNH2 (I; n = 2-4, m = 0-10) with a polymeric intermediate prepared from methacrylic acid and an alkyl methacrylate. Thus, a 1:1:1 molar mixture of methacrylic acid, decyl methacrylate, and hexadecyl methacrylate was polymerized in the presence of azobisisobutyronitrile and dodecyl mercaptan at 65° for 16 h and the interpolymer [**62766-43-2**] obtained reacted with a stoichiometric amount of ethylenediamine to give an **additive** product useful for mineral lubricating oil applications.
IT **62766-43-2P**
RL: **PREP (Preparation)**

(preparation of)
RN 62766-43-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with decyl 2-methyl-2-propenoate and hexadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

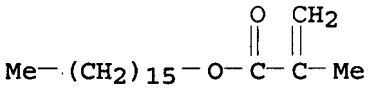
CM 1

CRN 3179-47-3
CMF C14 H26 O2



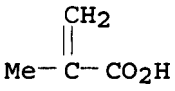
CM 2

CRN 2495-27-4
CMF C20 H38 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC C08G069-26
CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 37
IT **62766-43-2P 64723-27-9P 64723-28-0P**
RL: **PREP (Preparation)**
(preparation of)

L26 ANSWER 48 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:455637 HCAPLUS
DOCUMENT NUMBER: 87:55637
TITLE: N-Substituted acrylamidines and copolymers made from them
INVENTOR(S): Jolivet, Yannick; Lachevre, Christian
PATENT ASSIGNEE(S): Compagnie Francaise de Raffinage, Fr.
SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2645128	A1	19770414	DE 1976-2645128	19761006
			<--	
DE 2645128	C2	19840705		
FR 2327233	A1	19770506	FR 1975-30537	19751006
			<--	
FR 2327233	B1	19820702		
BE 846981	A1	19770406	BE 1976-171268	19761006
			<--	
JP 52046011	A	19770412	JP 1976-120230	19761006
			<--	
JP 62023800	B	19870525		
NL 7611036	A	19770412	NL 1976-11036	19761006
			<--	
ES 452152	A1	19771001	ES 1976-452152	19761006
			<--	
CA 1079444	A1	19800610	CA 1976-262873	19761006
			<--	
US 4198497	A	19800415	US 1977-832065	19770909
			<--	
PRIORITY APPLN. INFO.:			FR 1975-30537 A	19751006
			<--	
			US 1976-729139 A3	19761004
			<--	

AB The preparation of the amidines CH2:CHC(:NCHMe2)NR1R2 (I) (R1, R2 = H, Et, Pr, Bu, C5H11, C18H37) and their copolymers, useful as lubricating oil **additives**, is described. Thus, adding 0.4 mol CH2:CHCN [107-13-1] in 20 mL Me2CHCl [75-29-6] dropwise to 0.4 mol FeCl3 and 380 mL Me2CHCl stirred at 0°, stirring 30 min at 0°, and adding 0.4 mol Me2CHNH2 in 20 mL CH2Cl2 dropwise gives I (R1 = Me2CH, R2 = H) (II). Stirring a PhMe solution 0.10 M in II, 1.23 M in CH2:CMeCO2C12H25, and 0.095 M in AIBN 1 h at 80° gives 63% copolymer (III) [**63391-78-6**], mol. weight 71,000, N content 0.34%. Neutral oil 200 containing 7.7% III has viscosity 14.95 and 104.65 cSt at 210 and 100°F, resp., and viscosity index 161; compared with 6.3, 44, and 100, resp., in the

absence of III.

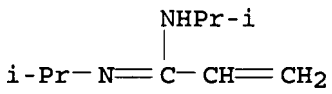
IT **63391-72-0P**
RL: **PREP (Preparation)**
(preparation of)

RN 63391-72-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with N,N'-bis(1-methylethyl)-2-propenimidamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

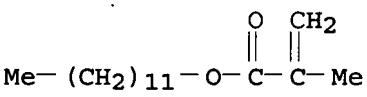
CM 1

CRN 50601-67-7
CMF C9 H18 N2



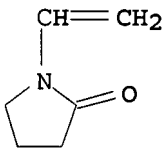
CM 2

CRN 142-90-5
CMF C16 H30 O2



CM 3

CRN 88-12-0
CMF C6 H9 N O



IC C07C123-00

CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 23, 35

IT 50601-67-7P 63391-69-5P 63391-70-8P 63391-71-9P
63391-72-0P 63391-74-2P 63391-75-3P
63391-76-4P 63391-77-5P 63391-78-6P
63400-02-2P 63400-03-3P 63400-04-4P 63400-05-5P
63426-64-2P
RL: **PREP (Preparation)**
(preparation of)

L26 ANSWER 49 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:463240 HCAPLUS
DOCUMENT NUMBER: 83:63240

TITLE: Crude oil mixture with improved flow properties
PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V., Neth.
SOURCE: Austrian, 8 pp.
CODEN: AUXXAK
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AT 318784	B	19741111	AT 1972-2100 <--	197203 13
PRIORITY APPLN. INFO.:			AT 1972-2100 <--	A 197203 13

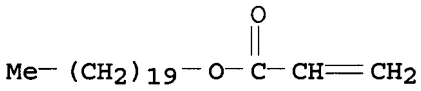
AB Copolymers of C19-alkyl acrylates and 4-vinylpyridine (mole ratio 2-3.1:1, mol. weight 40-60,000) used in amount 400 ppm improve flow properties of African crude oils preventing wax deposits in pipelines. The effect was estimated by pour point determining according to ASTM D-97-66 at decreased cooling rate to 5°/hr and 3°/day. The pour point of the crude oil was 0-6° and without **additives** 24°. The **additives** can be used for **dewaxing** of oil wells.

IT **27029-57-8**
RL: USES (Uses)
(paraffin wax inhibitors, in petroleum pipelines and wells)

RN 27029-57-8 HCAPLUS
CN 2-Propenoic acid, docosyl ester, polymer with eicosyl 2-propenoate and octadecyl 2-propenoate (CA INDEX NAME)

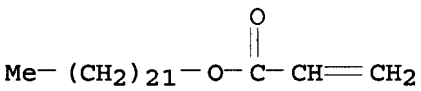
CM 1

CRN 48076-38-6
CMF C23 H44 O2



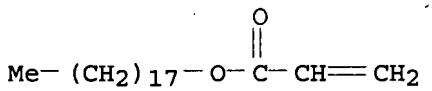
CM 2

CRN 18299-85-9
CMF C25 H48 O2



CM 3

CRN 4813-57-4
CMF C21 H40 O2



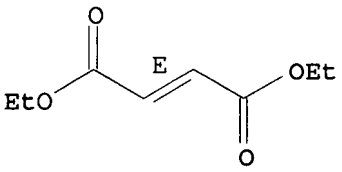
IC C10L
CC 51-1 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 37
IT 79-10-7D, 2-Propenoic acid, alkyl esters, polymers with vinylpyridine **27029-57-8 41232-38-6**
RL: USES (Uses)
(paraffin wax inhibitors, in petroleum pipelines and wells)

L26 ANSWER 50 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:88292 HCAPLUS
DOCUMENT NUMBER: 82:88292
TITLE: Lubricity additives. New class based on polymers and esters
AUTHOR(S): Misra, A. K.; Mehrotra, A. K.; Srivastava, R. D.; Nandy, A. N.
CORPORATE SOURCE: Def. Res. Lab., Kanpur, India
SOURCE: Proc. World Conf. Ind. Tribol., 1st (**1973**), Meeting Date 1972, B2, 6 pp.. Editor(s): Malhotra, R. C. Indian Soc. Ind. Tribol.: New Delhi, India.
CODEN: 29CKAX
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In a ball-wear test machine, 25 vinyl ester and acrylic polymers or copolymers and 8 simple or complex long chain esters of glycerol, sorbitol, neopentyl glycol, diethylene glycol, diethylene and polyethylene glycol were evaluated at 0.05-1.0% concentration in light mineral oil, aviation turbine fuel, and winter and sub-zero diesel fuels. Several of the compds. were effective as antiwear additives.
IT **52383-76-3**
RL: **PREP (Preparation)**
(fuel and lubricating oil **additives**)
RN 52383-76-3 HCAPLUS
CN 2-Butenedioic acid (2E)-, diethyl ester, polymer with butyl 2-methyl-2-propenoate and dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

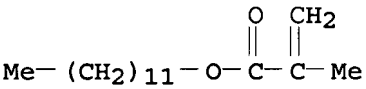
CRN 623-91-6
CMF C8 H12 O4

Double bond geometry as shown.



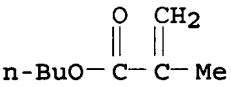
CM 2

CRN 142-90-5
CMF C16 H30 O2



CM 3

CRN 97-88-1
CMF C8 H14 O2



CC 51-7 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 36, 37
IT 123-95-5 1323-39-3 1338-43-8 2402-58-6 7003-73-8
16635-51-1 25496-72-4 52383-46-7 **52383-76-3**
52383-77-4 52438-03-6 52467-26-2
54578-66-4 54578-67-5 54578-68-6 54578-69-7
RL: USES (Uses)
(fuel and lubricating oil **additives**)
IT **25719-52-2** 27456-04-8 **52383-42-3** 52383-52-5
52383-53-6 **52383-72-9 54518-61-5** 54518-63-7
54518-64-8 54578-76-6
RL: USES (Uses)
(fuel and lubricating oils **additives**)
IT **52383-79-6P**
RL: **PREP (Preparation)**
(preparation of)

L26 ANSWER 51 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:160340 HCAPLUS
DOCUMENT NUMBER: 78:160340
TITLE: Copolymers of 1-alkene and acrylic acid derivatives
INVENTOR(S): Leister, Norman Andrew; Piccolini, Richard John
PATENT ASSIGNEE(S): Rohm and Haas Co.
SOURCE: Ger. Offen., 39 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent

LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2243064	A1	19730329	DE 1972-2243064 <--	19720901
US 3968148	A	19760706	US 1971-180142 <--	19710913
GB 1406664	A	19750917	GB 1972-41290 <--	19720906
ZA 7206122	A	19731031	ZA 1972-6122 <--	19720907
IT 968322	B	19740320	IT 1972-69866 <--	19720908
JP 48056613	A	19730809	JP 1972-93794 <--	19720911
BR 7206273	D0	19730823	BR 1972-6273 <--	19720912
AU 7246582	A	19740321	AU 1972-46582 <--	19720912
ES 406876	A1	19760201	ES 1972-406876 <--	19720912
BE 788752	A1	19730313	BE 1972-121960 <--	19720913
NL 7212436	A	19730315	NL 1972-12436 <--	19720913
FR 2152936	A1	19730427	FR 1972-32500 <--	19720913

PRIORITY APPLN. INFO.: US 1971-180142 A 19710913 <--

AB The title oligomers, having narrow mol. weight distribution and uniform

composition, useful as lubricating oil **additives**, are prepared by continuous addition of 2 acrylic acid derivs. to a mixture of C4-32 1-alkene and radical catalyst so that the mole ratio of acrylic acid to olefin remains relatively constant at .sim. 0.01-0.20. Thus, addition over 3 hr of 2 mixture of 84g lauryl acrylate, 6 g 4-[2-acryloyloxy)ethyl]-3-morpholinone, and 0.8 g dicumyl peroxide to 110 g 1-tetradecene and 0.2 g dicumyl peroxide stirred at 150.deg. and 15 hr stirring at 150.deg. gives 52.4% 4.5:70.3:25.2 4-[2-(acryloyloxy)ethyl]-3-norpholinone-aluryl acrylate-1-tetradecene copolymer [**40472-47-7**].

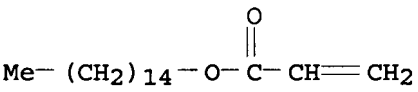
IT **39330-36-4DP**, 1-Hexadecene, polymer with dodecylpentadecyl 2-propenoate and 2-propenoic acid, reaction products with ethylene oxide and polyalkalene polyamines
RL: **PREP (Preparation)**
(preparation of)

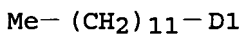
RN 39330-36-4 HCAPLUS

CN 2-Propenoic acid, polymer with dodecylpentadecyl 2-propenoate and 1-hexadecene (9CI) (CA INDEX NAME)

CM 1

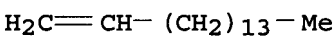
CRN 50972-56-0
CMF C30 H58 O2
CCI IDS





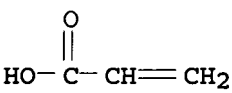
CM 2

CRN 629-73-2
CMF C16 H32



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC C08F
CC 35-3 (Synthetic High Polymers)
IT 75-21-8DP, Oxirane, reaction products with acrylic acid

derivative-olefin polymers 111-40-0DP, 1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with acrylic acid derivative-olefin polymers **39330-36-4DP**, 1-Hexadecene, polymer with dodecylpentadecyl 2-propenoate and 2-propenoic acid, reaction products with ethylene oxide and polyalkalene polyamines **39330-37-5DP**, 1-Hexadecene, polymer with dodecylpentadecyl 2-propenoate and methyl 2-propenoate, reaction products with ethyl formate and triethylenetetramine **39330-38-6DP**, 1-Hexadecene, polymer with dodecylpentadecyl 2-propenoate and methyl 4-pentenoate, reaction products with diethylenetriamine **39330-38-6DP**, 4-Pentenoic acid, methyl ester, polymer with dodecylpentadecyl 2-propenoate and 1-hexadecene, reaction products with diethylenetriamine **39339-81-6P 39340-78-8P 41206-52-4DP**, 4-Pentenoic acid, methyl ester, polymer with dodecyl 2-propenoate and 1-tetradecene, reaction products with (aminopentyl)imidazoline **41206-52-4DP**, 1-Tetradecene, polymer with dodecyl 2-propenoate and methyl 4-pentenoate, reaction products with (aminopentyl)imidazoline 41375-98-8DP, 1H-Imidazole-2-pentanamine, dihydro-, reaction products with acrylate ester-tetradecene polymers
RL: **PREP (Preparation)**
(preparation of)

L26 ANSWER 52 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:78546 HCAPLUS
DOCUMENT NUMBER: 70:78546
TITLE: Methacrylate-N-vinyl-3-morpholinone copolymers as lubricant additives
INVENTOR(S): Bearden, Charles R.
PATENT ASSIGNEE(S): Dow Chemical Co.
SOURCE: U.S., 3 pp. Division of U.S. 3210282
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

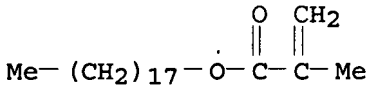
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3418296	A	19681224	US 1965-478510	19650701

PRIORITY APPLN. INFO.: US 1965-478510 A 19650701

AB The disclosure is the same but the claims are different.
IT **27936-68-1P**
RL: **IMF (Industrial manufacture); PREP (Preparation)**
(manufacture of, for lubricating oil **additives**)
RN 27936-68-1 HCAPLUS
CN Methacrylic acid, octadecyl ester, polymer with dodecyl methacrylate, hexyl methacrylate and 4-vinyl-3-morpholinone (8CI) (CA INDEX NAME)

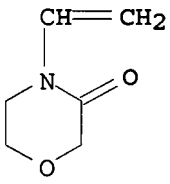
CM 1

CRN 32360-05-7
CMF C22 H42 O2



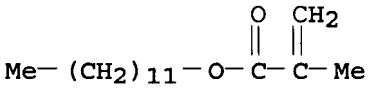
CM 2

CRN 4986-85-0
CMF C6 H9 N O2



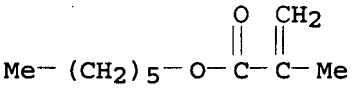
CM 3

CRN 142-90-5
CMF C16 H30 O2



CM 4

CRN 142-09-6
CMF C10 H18 O2



INCL 260080720
CC 35 (Synthetic High Polymers)
IT **27936-68-1P**
RL: **IMF (Industrial manufacture); PREP (Preparation)**
(manufacture of, for lubricating oil **additives**)

L26 ANSWER 53 OF 53 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1957:83594 HCAPLUS
DOCUMENT NUMBER: 51:83594
ORIGINAL REFERENCE NO.: 51:15111g-h
TITLE: **Dewaxing** of mineral oils

INVENTOR(S): Cohen, Max
PATENT ASSIGNEE(S): Esso Standard Societe anon. francaise
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2798027		19570702	US 1954-461666	195410 11

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AB Mineral oils are **dewaxed** by use of 2 **additives** which improve the wax filtration rate. The **additives** consist of: (1) a Friedel-Crafts condensation product of a halogenated, preferably chlorinated, paraffin and an aromatic or phenolic compound; and (2) a polymer of a compound having the general formula RC(R'):C(R'')COOR''', in which R is H or an alkyl radical, R' is H or a halogen atom, R'' is H, a halogen atom, or an alkyl radical, and R''' is an alkyl, aralkyl, or alicyclic radical having ≥ 8 C atoms. Use is described of a condensation product (I) of chlorinated paraffin and C10H8 with a polymer of pentadecyl methacrylate (Acryloid 150). In another example, 33% I and 67% of a 20-80 vinyl acetate-"Lorol" fumarate copolymer were used. The total amount of **additive** is preferably 0.005-1.0% of the weight of the oil. The 2 **additives** have a synergistic effect.

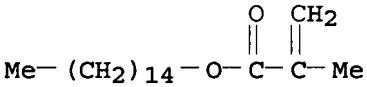
IT **27029-48-7**, 1-Pentadecanol, methacrylate, polymers
(in **dewaxing** of mineral oils)

RN 27029-48-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, pentadecyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 6140-74-5
CMF C19 H36 O2



CC 22 (Petroleum, Lubricants, and Asphalt)

IT Methacrylic acid, pentadecyl ester, homopolymer
(in **dewaxing** of mineral oils)

IT **27029-48-7**, 1-Pentadecanol, methacrylate, polymers
(in **dewaxing** of mineral oils)

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